

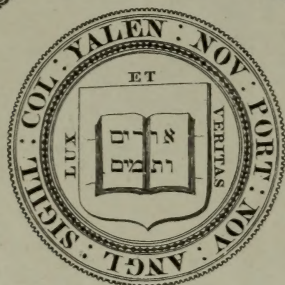
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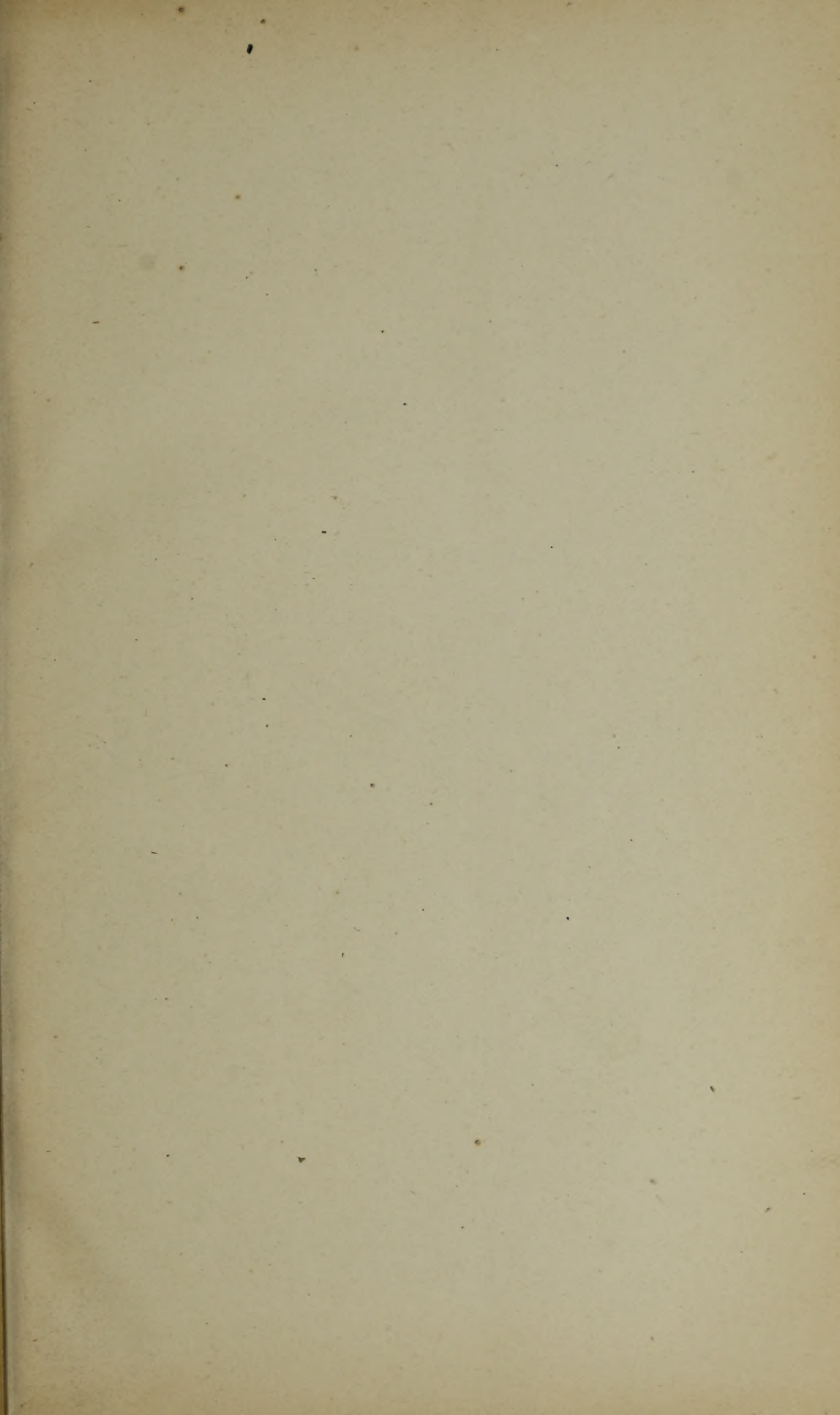
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AMERICAN ANNALS
OF THE
DEAF AND DUMB,

EDITED BY

EDWARD A. FAY,

UNDER THE DIRECTION OF

E. M. GALLAUDET, OF WASHINGTON, I. L. PEET, OF
NEW YORK, W. J. PALMER, OF ONTARIO,
AND THOMAS MACINTIRE, OF
INDIANA,

Executive Committee.

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CONTENTS.

NUMBER I.

PAGE.

The Annals, ...	By the Editor,	1
The Summer Residence of the St. Petersburg Institution,		
	By E. M. GALLAUDET, Ph. D., LL. D.,	7
Methodical Signs Instead of Colloquial,		
	By W. A. COCHRANE, M. A.,	11
Natural Signs—Shall They Be Abandoned?		
	By Rev. J. R. KEEP, M. A.,	17
Is the Sign-Language Used to Excess?		
	By E. M. GALLAUDET, Ph. D., LL. D.,	26
Guilty, or Not Guilty?	Translated from the German,	33
Sacred Silence, ...		42
Sketch of A. B. Hutton, ...	By B. D. PETTENGILL,	44
Necrology: George Hutton, ...	By H. P. PEET, Ph. D., LL. D.,	49
MISCELLANEOUS: The Educated Deaf-Mute's Compensation; Remarkable Cases; A Japanese Letter; The Growth of the Institutions; The Liverpool Institution; The Ontario Institution; The New York Institution; The College Graduates; Conventions of the Deaf and Dumb; Relief for the Alsace Institution; Attempted Murder of Mr. Deutsch; Trial of an Uneducated Deaf-Mute for Murder; Shooting of a Deaf-Mute; Books Relating to the Deaf and Dumb, ...		
	By the Editor,	50

NUMBER II.

A Practical View of Deaf-Mute Instruction,	By ISAAC LEWIS PEET, M. A.,	69
Science for the Deaf and Dumb, ...	By F. D. CLARKE, M. A.,	97
The Dedication of the Columbia Institution, ...	By the Editor,	111
The Late Rev. Collins Stone, ...	By SAMUEL PORTER, M. A.,	124
The Annals, ...	By the Editor,	142

NUMBER III.

Arithmetic for Deaf-Mutes, ...	By RICHARD S. STORRS, M. A.,	143
We Are Not Retrograding, ...	By WALTER W. ANGUS,	160
The Deaf and Dumb in Parliament, ...	By RICHARD ELLIOTT, M. A.,	174
Semi-Centennial Celebration of the Pennsylvania Institution,		
	By M. L. BROCK, M. A.,	183

	PAGE.
The Clerc Memorial, ... By EDMUND BOOTH,	194
Mr. Hutton's Text-Books, ... By the Editor,	196
MISCELLANEOUS: The National College; The Iowa Institution; The Michigan Institution; An Institution in Oregon; The Boston Day-School; A Day-School in Chicago; The Ulster Institution; The Indianapolis Convention; Monument to Laurent Clerc; Highly Educated Deaf-Mutes; A Deaf Legislator; A Deaf-Mute Franc-Tireur; Discipline in Schools; Murder in the Hull Institution, ... By the Editor,	201

NUMBER IV.

The Cottage Plan, ... By BENJAMIN TALBOT, M. A.,	211
The Sign-Language, ... By Rev. J. R. KEEP, M. A.,	221
The Stockholm Institution, . . By E. M. GALLAUDET, Ph. D., LL. D.,	235
INSTITUTION REPORTS: Hartford; New York; Kentucky; Ohio; Virginia; Indiana; Missouri; Louisiana; Wisconsin; Michigan; Texas; Columbia; Alabama; Minnesota; New York "Improved Instruction;" Clarke; Arkansas; Maryland; Nebraska; West Virginia; Halifax, ... By the Editor,	237
How to Get a Principal, ...	270
MISCELLANEOUS: The Iowa Institution; The Silent World, ... By the Editor,	274

AMERICAN ANNALS
OF THE
DEAF AND DUMB.

VOL. XVI., No. 1.

JANUARY, 1871.

THE ANNALS.

BY THE EDITOR.

With the present number of the *Annals*, begins its sixteenth volume. Some of our readers have requested us to give a sketch of its history from the beginning. As its career has not been a very eventful one, its story may be briefly told.

The publication of the *Annals* was begun at Hartford, in October, 1847, by the instructors of the American Asylum. There was then no periodical devoted to the interests of the deaf and dumb, in the English language; and, since that time, this field has been occupied by the *Annals* alone, with the exception of some magazines and papers designed chiefly for the reading of deaf-mutes. During the two years that the publication was conducted by the gentlemen of the American Asylum, nearly all the articles were contributed by themselves. Finding that the demand thus made upon the time of a few individuals was too great, and

having, as they thought, done their share for the present in this direction, they suspended the work with the last number of the second volume; expressing the hope, however, that it might be resumed at some future time.

In August, 1850, the first of those Conventions of American Instructors of the Deaf and Dumb, which at intervals during the last twenty years have been the occasion of so much profit and pleasure to the members of our profession, was held at the New York Institution. At this Convention, it was unanimously resolved to publish a periodical devoted to the cause of deaf-mute instruction, which should be the common property, as to its control and management, of all the institutions for the deaf and dumb in the country. It was decided to adopt the title, size, time of issuing and general appearance of the publication formerly issued at Hartford, and to regard it as the continuation of the series there commenced. It was to "partake of a scientific and also of a popular character, embracing the widest range of subjects connected with the education of the deaf and dumb, and articles of a narrative or imaginative cast, such as would be interesting to educated deaf-mutes and their intelligent friends." An executive committee, consisting of W. W. Turner, of Connecticut, H. P. Peet, of New York, and J. S. Brown, of Indiana, was elected, to whom "such matters as they might require were to be referred by the editor," and whose duty it should be "to tender the editor such aid, counsel and advice as he might require." Luzerne Rae, of the American Asylum, who, as we judge from the internal evidence of the first two volumes, had been the leading spirit—*primus inter pares*—of the former series, was elected editor under the new *regime*. Mr. Rae possessed a brilliant mind, refined taste and varied culture, as the pages of the *Annals* under his management unmistakably prove; he conducted the publication very suc-

cessfully, up to the time of his sudden death, in September, 1854. His successor was Samuel Porter, then of the American Asylum, whose accurate scholarship, sound judgment and extensive reading were of great service in his editorial labors. He continued editor until 1861, when the secession of the southern states and the war, interrupting the communication between the institutions of the North and the South, and depriving the *Annals* of a portion of its means of support, seemed to render its suspension necessary.

At the Conference of Principals of American Institutions for the Deaf and Dumb, held at Washington, in May, 1868, it was decided that the publication of the *Annals* should be resumed, and an executive committee was elected, consisting of E. M. Gallaudet, of Washington, C. Stone, of Connecticut, I. L. Peet, of New York, W. J. Palmer, of North Carolina, and Thomas MacIntire, of Indiana;—the same gentlemen, who, having been re-elected by the Convention of Instructors held last August, at Indianapolis, still constitute the Committee. The *Annals* being thus revived, and established upon a better pecuniary basis than ever before, Lewellyn Pratt, then of the National Deaf-Mute College, was chosen editor, and filled this office until his withdrawal from the work of teaching the deaf and dumb—which was such a loss to our profession in every way—and his absorbing duties in another field of labor, compelled him to resign it. The present editor, who succeeded him, began with the July number of last year.

In reading through these volumes of the *Annals* which have already appeared, we have been deeply impressed with the value of their contents. They include the greater part of the literature of our profession in the English language, excepting, of course, textbooks, and are almost indispensable to any who wish to acquaint themselves with the art of instructing the

deaf and dumb, its history and its theories, especially to those who would become successful teachers.

The present editor enters upon the office to which he has been chosen, with the sincere desire and the earnest purpose to make the *Annals*, in every respect, worthy of the profession which it represents, and to this end he invites the co-operation and assistance of all the friends of deaf-mute education, especially of those who are engaged in the work of instruction. Notwithstanding the great progress which has been made in the education of the deaf and dumb within this century, none of us believe that the highest possible degree of success has yet been reached. It is hoped that the *Annals* may help towards its attainment. Every one who places on record here anything of value, in the way either of experience or of theory, contributes something to the accomplishment of the great work which we have at heart. In this connection it may be proper to mention—in recognition of the principle that “the laborer is worthy of his hire”—that the treasury of the *Annals* is now in a condition which enables it to offer a small pecuniary return for contributions to its pages. Our rates are far from being as high as we wish they were; but it is supposed that even a slight acknowledgment, in this way, of the value of his articles, is not unwelcome to a contributor.

While the educational interests of the deaf and dumb have, of course, the prominent place in the *Annals*, its scope is not limited to these. The range of topics allowed in the resolution of the Convention of 1850, which we have quoted above, is sufficiently broad. Statistics of all kinds relating to the deaf and dumb, which, if not in themselves the most agreeable reading, are yet of much value in many ways; statements concerning the causes of deafness, and the means proposed for its prevention and cure; papers upon the social and legal relations of the deaf and

dumb, educated and uneducated, to the community; discussions of methods of teaching, new and old, including every thing that seems likely to be of practical use in the school-room; sketches of institutions and schools, at home and abroad; biographical notices of distinguished deaf-mutes and of eminent instructors; translations from foreign publications; as a set-off, perhaps, to the statistics, "articles of a narrative or imaginative cast," including, of course, poetry; reviews of books; items of information; everything, in fact, that tends to promote the physical, intellectual or moral welfare of the deaf and dumb as a class, or that is of especial interest or value to teachers of deaf-mutes and others concerned for their elevation, may properly find a place in its pages. While its contents are chiefly original, we do not hesitate to borrow available material from any source whatever. We wish the *Annals* to be a cyclopedia of everything of value in the English language, relating in any way to the deaf and dumb; the only exception being in the case of printed matter too bulky to find room within its limits; under which circumstances it may serve as a directory and guide, informing its readers where to go for further information.

We hope it is clearly understood that the *Annals* is not the "organ" of any one system of instruction, of any particular institution or institutions, of the executive committee, or of the editor. The members of the committee and the editor have, doubtless, each opinions of his own upon the various questions connected with the education of the deaf and dumb, and claim the same right of expressing them in the *Annals* that is accorded to others; no more, no less than this. Papers upon all subjects within the province of this journal are welcomed from every quarter, and are published, with the writer's name and on his responsibility, without any reference to the private views of the editor or other persons; the only requirement being that they

shall reach a reasonable standard of literary excellence, be courteous in tone, and possess interest and value for our readers.

At the Indianapolis Convention of Instructors, a resolution was passed, expressing the opinion that the printing of the *Annals* should be done in one of the institutions for the deaf and dumb possessing facilities for such work, provided it could be executed in a satisfactory manner and for a reasonable price. In accordance with this resolution, the *Annals* is now printed in the Illinois Institution for the Deaf and Dumb. This being at a distance from the editor and involving much sending to and fro of copy and proof, it is possible that delays may sometimes occur in the publication, and that errors may sometimes creep into the print. Both editor and printers, however, pledge themselves to do all in their power to ensure promptness and accuracy; we hope we shall not often have to ask the indulgence of subscribers and contributors for shortcomings in these respects. Contributors will see the necessity of placing their manuscripts in our hands as long a time as possible in advance of the date of publication.

At present the subscription list of the *Annals*, outside of the institutions for the deaf and dumb, is not large. We believe that this periodical contains much that is adapted to interest and profit educated deaf-mutes and their friends, as well as teachers, men of science and philanthropists generally. With a view to extending its circulation and influence, and thus increasing the interest of the community in the welfare of the class to whose advancement it is devoted, we shall take pleasure in sending a specimen copy, free, to any address which may be given us for this purpose.

THE SUMMER RESIDENCE OF THE ST. PETERSBURG INSTITUTION FOR THE DEAF AND DUMB.

BY EDWARD M. GALLAUDET, PH. D., LL. D., WASHINGTON.

An interesting and novel feature of the Imperial Institution for the Deaf and Dumb at St. Petersburg is its summer retreat.

Visiting the school in July, 1867, I found the city quarters of the establishment, spacious and even palatial in their appointments, under lock, key and seal; and was told to look for the officers and pupils on one of the islands formed by the dividing channels of the Neva, where it empties itself into the Gulf of Finland.

Few large cities are as favorably located as St. Petersburg, in the regard of easy access, by the great mass of its inhabitants, to eligible summer residences. The delta of the Neva, besides furnishing an immense water frontage for shipping, ample for the purposes of a great commercial metropolis, forms several islands of considerable extent, disconnected each from the other by streams easily bridged. These islands are undulating in surface, fertile in soil and well wooded. Swept by the salt breezes from the Gulf, the air on them is pure and exhilarating. Taken altogether, they combine all the desirable elements of a pleasant summer home, save only that of mountain scenery.

These islands are intersected by fine roads, and contain already many thousands of houses, ranging in size from the humble cottage of the mechanic or small merchant, to the lordly villa of royalty.

It was on one of these romantic islands, that a location had been made for the institution for deaf-mutes, to be used during the months of July, August, and September.

The pupils of this institution come, many of them, from distant portions of the empire; and the location of St. Petersburg is such that very few of the children can return to their homes during the period of their

pupilage. Thus it occurs that the entire school remains practically together, without interruption, from year to year.

So intense is the heat of midsummer in northern Russia, that, in the large cities, the practice of taking a brief sojourn in the country has become quite as general as in this country. Indeed, an observance of the custom seems almost essential to the preservation of health. The weight of this consideration, and the general desirableness of a change in the somewhat monotonous routine of institution life, induced the managers of the Imperial school to provide, a few years since, the grounds and buildings now to be described.

A pleasant frame house, not unlike many seen in the rural towns of New England, was assigned as a residence for the principal. Vine covered piazzas, an ample garden filled with thrifty flowering plants, and fine shade trees, formed delightful surroundings for the house, making it all that could be desired for a summer home. The frontage of this house was on a wide, well shaded public avenue, on the opposite side of which stood the buildings and grounds occupied by the officers and pupils of the institution.

Here, a range of low frame structures furnished comfortable, though very plain accommodations for about two hundred persons. Some of the rooms were plastered, but the majority were finished in unpainted wood.

A simple arrangement of school-rooms, dining-hall, dormitories and study-rooms, with apartments for officers and teachers, the cost of all which must have been very trifling, gave every needed comfort for the summer season, impressing me with an idea of picnic or camp life that was very refreshing.

Around the buildings were fine groves of trees, and, some little distance away, a bathing pool of about two hundred feet in diameter had been constructed. The water for

this was supplied from a flowing spring, the running of which kept the pool always clear. A high, close fence shielded the bath from intrusion, and convenient dressing rooms were built upon one side. Once each day the pupils were required to bathe in this pool, going in companies of thirty or forty together, under the supervision of some officer of the institution.

School exercises are continued during the summer months for two hours daily, the teachers acting in a rotation that gives them even more liberty than the pupils enjoy.

Excursions about the island, and to other islands, or on the river, are frequent; the pupils going in small parties under the care of their teachers.

In no institution which I was permitted to visit in Europe, did the family relation between officers, teachers and pupils seem so happily developed as in the St. Petersburg school. The instructors seemed to regard their pupils as younger brothers and sisters—the faces of the latter wearing an expression of confidence and content, that challenged my attention as unusual. And this pleasant relation between teacher and taught seemed a natural result from the manner of life pursued in the summer.

My day in this delightful retreat was fitly closed on the piazza of the principal's house, where I met his affable and courteous lady, and several of the officers of the institution, who had been invited by Mr. Selesneff to meet me at dinner. French and German were spoken by most of those present, and for the few who were limited to their native language, my friend Mr. Timerasoff, whose *mother* tongue was English, his father being a Russian, acted as a ready interpreter.

The beauty of the islands of the Neva, as a summer resort, cannot be understood without a knowledge of what night is, in that latitude. So I trust I may be pardoned, if I close this brief sketch with a reminiscence

not indicated in the title, but which may not seem out of place in this connection.

Returning to the city at about seven o'clock in the evening of the day on which I visited the institution, I found an invitation awaiting me to an evening sail on the river with two English friends. Meeting them by appointment at half past eight, we rode in a rattling Russian droschke, a vehicle I will not attempt to describe, for two miles, to an island near the mouth of the river. Here a beautiful spot, about an acre in extent, had been set apart by an order from the Emperor for the use of an English boat club. A spacious boat house had been constructed—a keeper was always on the ground—and some half dozen fairy-like boats, light enough almost to float in air, told of Oxford and Cambridge training and tastes.

Choosing one carrying two oars and a coxswain, our trio were soon afloat, making rapidly for a point which commanded an outlook to the sea. This we gained at half past nine o'clock, just in time to see the sun pass below the horizon, amid a flood of radiance in sky and sea, which would have been pronounced impossible in a painting.

On the land were assembled hundreds of carriages, filled with gaily dressed people—for this was a favorite resort to view the setting sun; on the water, calm as that of an inland lake and clear as the air above it, were scores of boats, various in size and shape; behind us were the wooded shores of the islands, green to the very verge; and before us lay the blue gulf with its gleaming waves rippling far away, to kiss the fleecy clouds which lingered on the distant horizon.

Loath to leave a scene so brilliant, we at length retraced our course, went in and out among the islands, marking the beautiful homes that lined their banks, until past midnight. And then, wending our way homeward in a twilight that was hardly darker than a cloudy noon, we observed the golden light of morning

streaking the East, while the crimson rays of evening still brightened the home of the setting sun.

METHODICAL SIGNS INSTEAD OF COLLOQUIAL.

BY W. A. COCHRANE, M. A., DELAVAN, WISCONSIN.

[The question of "methodical" and "colloquial" signs has been so fully discussed in former volumes of the *Annals*, that it is with some hesitation that we yield space to the articles on this subject in the present number. There is still, however, so much difference of opinion in regard to the question, and its discussion excited such interest at the Indianapolis Convention, that we have decided to allow the debate to be renewed here. None of the giants who fought this battle in former days, acknowledged themselves defeated in the contest; Mr. Jacobs, as well as Dr. Peet and Mr. Burnet, withdrew from the field with colors flying, and face to the foe; *hoc toto proelio aversum hostem videre nemo potuit*. Probably the champions who take their places now will find equal difficulty in ever persuading each other to believe that either is beaten. But this discussion, as did the former one, will doubtless modify, more or less, the views of the readers of the *Annals*. Perhaps some of them will adopt the opinion which the writer of this paragraph, having read carefully all that has been said upon either side of the question, and having been, at one time, a zealous advocate of the "natural," and, at another, of the English order of signs, now holds, in all humility: that it does not, really, make a very great difference in what order signs are made, provided, always, they are so made as to be clearly understood; and that, in the school-room, the English language

itself should be used instead of signs, in all cases where *it* can be clearly understood. On this last point, we are all agreed, it seems, in opinion; how faithfully do we observe it in practice?—ED. ANNALS.]

I remember distinctly the first day I entered upon my duties as an instructor of the deaf and dumb. In the morning I entered my class-room in company with the principal of the institution, and, after some conversation, a book was opened, and a few phrases and sentences were dictated by signs. I was very much surprised when I found that the signs did not follow the order of the words, but were transposed in a manner which seemed to me to be entirely useless, and to bring unnecessary confusion to the mind of the deaf-mute.

The phrase, "a black horse," being changed into the sign language, became *a horse black*, and so, *a man black*, *a dog black*. The sentence, "a cat is sleeping in the cradle," when dictated by signs, was something as follows; *cat cradle in sleeping is*. Immediately there came the queries, Why this jargon? Why this mutilation of our mother tongue? Does it help the deaf-mute in gaining a knowledge of the English language? Is it any aid to him in his attempts to become acquainted with written language? And I asked the question, Why do not the signs follow the order of the words? Just what answer I received I am unable to tell; but I suppose it was the same answer which a large proportion of the instructors of the deaf and dumb would give at the present day.

But, still, during more than three years that I have been a teacher of the deaf and dumb, this query has clung to me all the time, Why do not the signs follow the order of the words? And the more I have looked into the subject, the more I have seen of its practical working, so much the more do I believe that the use of signs following the order of the words, as nearly as possible, is the true method for educating the

deaf and dumb. By educating, I mean, simply, giving the pupils a knowledge of the English language, teaching them how to compose and write English sentences correctly.

The great work of those engaged in the education of the deaf and dumb, is to teach language. This is the mountain of difficulty up which we must climb, or else leave our work undone. It requires patient toil, ceaseless effort, indefatigable labor. And if the deaf-mute cannot be taught to use language intelligibly and correctly; if he cannot learn to express his thoughts and ideas in correct written language, his education is almost a complete failure. A man does not know any thing, until he can explain it; until he can write it out, and give his reasons why it is so. Just so it is with the deaf-mute. He has thoughts and ideas, but if he cannot express those thoughts in correct written language, he might almost as well have no thoughts or ideas whatever. He is an ignorant being, groping in thick darkness.

Two very dissimilar methods of using signs are practiced by teachers of the deaf and dumb. The first of these is that of colloquial signs, or signs corresponding to the order of thought in the mind of the deaf-mute.

The other is that of methodical signs, or signs following the order of the words in written language. Now let us briefly compare these two methods, and find out, if possible, which is the right method for teaching language to the deaf-mute.

The deaf-mute comes to the institution without any knowledge of written language; without understanding in the slightest degree the syntax of our language. True, he has thoughts and ideas, but they are not arranged in his mind in the order of written speech. They do not correspond in any way to the proper grammatical form of English sentences. Hence, when he attempts to express his thoughts and ideas in writing, what follows? A violation of the rules of syntax; an

utter disregard of grammatical forms; the inversion of the different elements of the sentence; qualifying words placed after the words which they qualify; in short, to us, a jargon of words, but, to him, intelligible, and the natural order. Our minds, by education, have been led out of the natural order of thinking, into the unnatural order, if it may be called so, of the English language. And the deaf-mute, if he learns to write correctly and grammatically, must also be led out of his natural language of ideas, into one of words and sentences; or, briefly, he must be led to think, as nearly as possible, in the order of written words. He must do this, I believe, or else he will never write the English language correctly.

Now, which of the two systems of signs mentioned above will bring about such a result? Which will be the most apt to lead the thoughts of the mute out of his own native vernacular, into the form of spoken language? I answer, Methodical signs, or signs following the order of the words. Let us see what reason there may be for saying this.

Take, for illustration, a child just commencing his course of instruction. The teacher begins with sensible objects, such as the child has been accustomed to see from day to day. He commences with objects, many of whose peculiarities and characteristics are already known to the child from previous observation. By natural signs, the pupil comes to understand, that certain written characters and certain visible objects are one and the same. Now, after a number of these outward objects have been taught, adjectives are brought in and combined with them. Take, for example, the adjective *tall*, and combine it with the noun *man* previously taught. The adjective is first explained so that the child thoroughly understands its meaning. Then the signs are given for the phrase, "a tall man," in the order of the words. This the child understands, and learns how to write, and write correctly. Again, the same adjective is used in combination with

other objects, in conjunction with other nouns. The pupil goes farther, and writes original examples, and writes them in their proper order. Sentences are taken up in the same way, each word being taught separately, and then the sentence dictated in the proper order of the words. And thus the child is gradually led out of his own peculiar method of thinking, into one that corresponds with the order of written language.

Would not such a result take place inevitably, with sufficient practice? Is it not natural to expect just such a result? How is it in the case of the hearing child? How does he learn the proper position of words in the sentence? Why do we not have to spend years in teaching the hearing child, that the subject of a sentence, as a general thing, comes first; the predicate second; the object last; and that qualifying words are placed before the words which they qualify? How does he come to learn the correct order of words in a sentence, without any instruction whatever? Simply because he is hearing the English language in its proper order every day; and so, finally, he comes to adopt that as the right and natural order, and discards the order which the workings of his own mind suggest. If the hearing child heard the English language in the same order in which we give it to the mute by colloquial signs, there would be the same difficulty in teaching the proper order of words, in the one case as in the other.

If a German lad were learning to write our language, and his teacher should change the English sentence into the order of his own vernacular, and then tell him that that order was incorrect, and that he must change the elements of the sentence, would he learn to write our language as correctly, and in as short a time, under such a course of training, as he would, if the teacher should commence, at the very first, by giving him the proper order of English sentences?

Would not such a course be a continual draw-back to his progress?

The advocates of articulation maintain, I believe, that their pupils make more rapid progress in the acquisition of language, than those taught by signs. And it is natural that they should, for the reason that pupils in articulation are taught language in the order in which it must be used, and so they get hold of the English construction of sentences, sooner than those who are taught by signs.

We all know that spelling on the fingers, and continual practice in written language, are the two best and speediest methods for making deaf-mutes acquainted with the right construction of sentences. In my own class, I throw aside all signs, both colloquial and methodical, as much as possible, and depend upon dactylology in communicating with my scholars. Now, why does practice in written language and dactylology bring about such a result? Simply because the pupil receives his ideas in an order, which corresponds with the correct order of the words in the sentence. And so, in the reproduction of the idea into a sentence, or in originating a new sentence of his own embodying the same idea, the proper order of words is more apt to be used, than when the ideas are given by signs in the order of his native vernacular. Must not methodical signs assist the mute to get hold of the right construction of sentences, in the same way that dactylology helps him? I think so.

But, perhaps some one will say, if a sentence is dictated in the order of the words, the deaf-mutes will not understand it; they will not grasp the idea embodied in the sentence. I suppose that at first a mute might perhaps understand a sentence better, when dictated by colloquial signs, than by methodical. But by commencing with methodical signs in the very first stages of his education, and continuing their use in dictating phrases and sentences, the pupil soon comes

to take ideas in that order, so that, after a time, a sentence dictated by methodical signs is understood equally well, or perhaps even better, than when dictated by colloquial signs.

But, in advocating the use of methodical signs, I do not wish any one to suppose that I would do away with colloquial signs altogether, and use methodical signs only.

In giving information to the deaf-mute; in bringing before his mind new thoughts and ideas; in giving to him a knowledge of divine wisdom; in the unfolding of religious truth; colloquial signs can be used more advantageously than methodical. If the chief work of the teacher were simply the imparting of information, there would be no use whatever of methodical signs. But it must be remembered that the acquisition of *language*, and not the acquisition of *knowledge*, is the primary and chief labor of the deaf-mute. His great work is to become acquainted with the construction and syntax of our language. And, in this work, it seems to me that methodical signs can be used to great advantage.

NATURAL SIGNS.—SHALL THEY BE ABANDONED?

BY REV. JOHN R. KEEP, M. A., HARTFORD, CONN.

It was alleged, at the late Convention at Indianapolis, that those who graduate from our various institutions for the deaf and dumb, do not master the English language. The failure was attributed to the use of *natural signs*, which, with their inversions, were declared to be a dangerous instrument of instruction, and the remedy proposed was the use of signs in the order of words in spoken language.

Words, whether spoken or written, are by no means essential in the communication of thought. We stand by a painter, as he draws the outlines and brings out upon the canvas the figure of a bear, then sketches a man with a gun aimed at the bear, and finally puts a puff of smoke at the muzzle of the gun; not a word is spoken, but the picture tells us, in language unmistakable, that the man is shooting the bear. Again, take a scene in actual life. We see a horse running—a man falls from the overturned wagon—blood is flowing from his head. All this the artist, by a few strokes of his pencil, can reproduce. But, whether we look at the painting or at the actual scene, the same ideas are suggested. We are occupied with objects and events, and not at all with words. Another mode in which ideas may be suggested and thoughts communicated, quite independently of words, is by means of the pantomimic signs of the deaf and dumb. To illustrate their use, take the case presented above in a picture: viz., a man shooting a bear. By a few movements of the arms, the bear is placed before you—then, the man appears, gun in hand—he sees the bear—the gun comes down from the shoulder in deliberate and careful aim—it is fired—the bear falls dead upon the ground. The end sought is to give, so far as possible, an exact reproduction of the scene, and it is attained to a degree far beyond what the most elaborate and skillful painting could effect. Not only are the objects brought in vivid distinctness before the mind, but the actions performed, instead of being left to inference and suggestion, as they must be in a painting, actually take place before our eyes. In the painting, the bear must be presented as alive or dead; in signs, he is presented first alive, and, then, after receiving the fatal shot, as dying. The gun, in the picture, must be in one fixed position; in signs, it may be loaded,—placed upon the shoulder—at sight of the bear, brought down to a horizontal position,

aimed and fired. By pantomimic signs, the various *feelings* which animate the actors, and are suggested by an event, may, with minute accuracy, be described. Past scenes may be made present, persons long dead brought to life again.

But if signs, in all their varied scope, are, as we have seen them to be, simply a faithful reproduction of events in the manner and order of their occurrence, the language employed to describe such reproduced events can be in no respect peculiar, or different from that which would be employed to describe the same events in their original occurrence. If a boy should *see* a man shoot a bear and should describe the act, his language would be just as peculiar in its construction and in its mistakes, as if he should describe the same act given in a painting or in pantomimic signs, and no more so. All he has to express in words is the ideas, and these are given by signs *in the order and manner* in which they would be suggested in looking directly upon the events themselves.

Again, the use of natural signs in initiating deaf-mutes into the knowledge of verbal language, may be urged from the fact, well known to all who have carefully observed their own experience in learning a new language, that the greatest progress is made, only when ideas are wholly dissociated from words, so that the mind proceeds directly from the ideas to their expression. For one to repeat, in the same words, what is said to him, or to translate what is expressed in one language into another, is not what gives power or facility, but the gathering up of ideas which are not, as yet, clothed in any words, and then summoning from the hiding-places of the memory the forms in which they should be expressed. It is when we come to express our own thoughts in a new language, that we gain power and are conscious of progress in it.

Just these conditions are fulfilled in the highest degree, in writing from signs. The ideas only are

presented, and from these the mind proceeds directly to their expression in words.

If we relinquish the use of natural signs as an instrument of instruction, we shall lose, at length, our language of signs altogether. If, for example, signs are used in the order of words in our schools, from that moment will begin a deterioration, which will work the destruction of the sign language itself. We deprive ourselves not only of our present admirable, nay, almost perfect means of imparting religious instruction to the deaf and dumb—the educated and the uneducated alike—but we make the education of deaf-mutes in language an impossibility, by insanely destroying the indispensable means of such education.

To what, then, are the alleged defects of deaf-mutes in written language to be imputed? Simply, I answer, to the limited opportunities they have enjoyed for acquiring it. Beginning their school life with no knowledge whatever of any verbal language, making no use of words, or next to none, in their intercourse with each other while at school, using words but little with their friends, except on the most common and necessary topics, there remains only the brief fragment of each day in school when they are actually using written language. For it must be remembered that arithmetic, penmanship and drawing, which are taught in all our schools for the deaf and dumb, while they take up much time, are not, in any degree, promotive of a knowledge of verbal language. And this is almost equally true of a study of maps; except in the mere names of places, no knowledge of language is acquired in the study of this important part of geography. To this must also be added the time required in becoming familiar with written and printed characters, corresponding to the period spent by the speaking child in "learning to read."

Yet, in spite of all these disadvantages, under which the deaf and dumb labor in acquiring a knowledge of

our language, they may safely challenge a comparison with young men who have devoted from seven to ten years to the study of Latin or Greek. Can our college students read or use these foreign languages, to the acquisition of which they have devoted so much time, better than our average deaf-mutes can read and use the, to them, foreign English language? We are quite content to abide the verdict of any competent person who may feel inclined to investigate the facts.

To say that deaf-mutes do not *master* the English language, under all the disadvantages of their condition and the exceedingly limited use of it possible to them during the time of their school-days, is to state an obvious fact indeed, and one which, to an intelligent mind, should excite no surprise, but, on the contrary, the wonder should be, that they are able to understand it and use it so well. Masters of the English language, forsooth! How few of those who have heard it through the ear and read it with the eye, and have spoken it with the voice and written it with the pen, from their infancy, can be said to have mastered it! How limited is the vocabulary actually used by most men, not exceeding, it is said, three or four hundred words out of the one hundred and fourteen thousand which are to be found in Webster's Dictionary! How slow and tedious is the process by which children pass from colloquial language to the more elevated and stately language of books! How many books are there in which technical and abstract language so abounds, as to make them, to all practical purposes, as if written in an unknown tongue, to the great majority of even intelligent and comparatively well educated men! *John Howe's Sermons*, *Butler's Analogy*, *Edwards On The Will*, or, even, *Milton's Paradise Lost*, are as much out of the intelligent scope of many of our countrymen, as if they were written in Latin or Greek. What ignorance, then, of the real facts of the case, is displayed by those who complain that the deaf-

mute, under all his disadvantages for its acquisition and use, does not, while at school, master the English language!

But, it may be said, admitting that the attainments of the deaf and dumb in language are all that could reasonably be expected, is it not true, nevertheless, that the "inversions," inseparable from natural signs, are a great obstacle to their progress?

I have already shown that our *thoughts of outward events* are, in the same degree, inverted, and that, if no embarrassment is experienced in consequence, none need be looked for from the use of natural signs, which are simply a reproduction of events as they appear to the eye of one beholding them, or to the actors in them. But perhaps some of my readers have become so familiar with artificial language, that they cannot be persuaded that the inversions, which appear in signs, are really in the *thoughts*, as well as in the signs. From such I solicit attention, while I add a further word or two in explanation and proof of my position.

Suppose, for example, that I strike a board. I do not strike the vacant air, seeing nothing, and having no idea of anything before me, until after I have struck, when, suddenly, a board rises up to receive the blow. I first see the board, I intend to strike it, and, with it before my sight, I strike. In exact conformity with this necessary order of nature and of fact, in describing this in signs, I say, *I a board strike*. It is against artificial language, then, that the charge of inversion properly rests.

Of the proposed substitution of signs *in the order of words* for natural signs, it should be remarked that such signs are not, and do not pretend to be, a reproduction of events as they occur in nature. In their use, the idea of a picture is impossible. None of the actors or objects can be located. Some glimmerings of sense may attach to the individual word-signs, as they are made, but the meaning of the whole is quite likely to

be lost, or altogether misconceived. Let the following simple sentences be given to an intelligent class of deaf-mutes, first, by signs in the order of words, and, then, by natural signs, and notice the difference in the result. *Two boys were fighting. One struck the other. Then the other struck him. Both were very angry.* If any idea at all is conveyed by the word-signs, made without any location of the various actors and objects, and, perhaps, without any conception on the part of the teacher of the scene before him, it will be, at most, only that of a general scrimmage. Blows are thrown out in various directions, which hit nobody, because sent where nobody is. Contrast with this confused jumble, the distinct and vivid picture of the same scene, given in natural signs. *Boys two, (one here)—(one there), fighting. Boy here—boy there—struck. Boy there—boy here—struck. Boy here—angry very. Boy there—angry very.*

Insisting, as I do, so strenuously on the use and value of natural signs, it may be thought, by some, that I am not sufficiently alive to the importance of the direct use of language in the work of instruction. I believe that the use of words by the teacher should be limited only by his power to make himself intelligible. It is the height of folly for him to go on using signs, in communicating ideas which he knows his pupils are perfectly competent to understand in words. But the deaf and dumb, it must be remembered, are to be educated not only to the *understanding* of language, but to its *use*, and there is no practical mistake, into which we, as teachers, are so liable to fall, as this of cultivating too exclusively the passive, receptive faculty, while we leave in comparative neglect the using faculty. A language, it is well known, may be understood and read, when there is no ability whatever to express one's thoughts in it. The problem for us to solve is, how we may secure from our pupils the greatest possible *use* of language. Shall we content ourselves with the few words or phrases which they will spontaneously

give us? Is the desired end reached, when they are able to express in language the few dim and vague thoughts which rise in their undeveloped minds? Certainly we want something more than this, and we secure it, and secure it only, when, day by day, we require them to express, in verbal language, the ideas which we have put clearly and freshly before them, by means of natural signs.

It may not be inappropriate, before concluding this article, to say a few words on the mode of acquiring the language of signs. It has been complained, that the deaf and dumb do not master the English language. What if, in the way of retort, it should be asked, whether the teachers of the deaf and dumb master the sign language? However humiliating the confession, if an honest answer is given, it must be, that many of them do not.

That the sign language may be acquired, it is necessary, first, to get an intelligent comprehension of what it is. English words, however elegantly written or printed, thrown into a bag to be taken out at random, would not make language. The words must have a certain order and relation to each other. Precisely so it is with signs. Individual objects may be correctly, and even gracefully delineated, but, unless they are placed in a certain order, no intelligent idea will be conveyed by them. What this order is, I have already sufficiently illustrated. Natural signs are *pictorial*, and are subject to all the conditions of a picture. It is safe to say, then, of a teacher of the deaf and dumb who has not discovered this essential character of the sign language, that he has not yet learned the language.

Secondly, to acquire the sign language, so as to be able to use it with effect, there must be a power of conceiving of absent objects. If a mountain is described, the mountain must be seen. The eye of the mind must sweep its vast slopes and rest on its summit. If a carpet of green grass is to be pictured, the grass must be

seen beneath your feet and all around, though you may be standing on a bare floor. So of scenes in which actions and events are represented, the persons must be distinctly before the mind, and all which they do and say, with reference to each other, must be as clearly seen and understood, as if they were actually alive and present.

Intimately connected with this power of vividly conceiving of absent objects, may be named, as qualities of great importance, in one who would use signs with power and grace, a certain vivacity of mind and body, mobility of features, a soul shining through the countenance, and clear ideas.

Thirdly, in acquiring the sign language, as in acquiring other languages, it is necessary {that one should have help. The first generation of teachers, in the American Asylum, at Hartford, each paid his fee of fifty dollars to Mr. Clerc, and received from him a regular course of lessons, and they have never been equalled in the skill and grace with which they used signs. If young teachers of the present day would aspire to their excellence, they, too, must have assistance, and generous assistance, from the principal and older instructors in their respective institutions.

To mention but one thing more. Perfection in the use of signs, or anything approaching perfection, will not be attained without much practice. *Use, continued use,* is the law of success in the acquisition of all languages. With these conditions of an accomplished scholar in signs, fulfilled in all our teachers, we should hear no more, I think, of the inversions of the sign language, or of proposals for its reconstruction.

IS THE SIGN LANGUAGE USED TO EXCESS IN TEACHING DEAF-MUTES?*

BY EDWARD M. GALLAUDET. PH. D., LL. D., WASHINGTON.

There are often ideas suggested for consideration, which seem to carry absurdity on their very face. One would smile, who should be asked if the art of swimming could not be acquired without venturing into the water, or if the deaf and dumb were not often fine musicians, or if Washington were not a finished city.

The writer is not without his apprehensions, lest there be some, who will be disposed to regard the question he now presents, as absurd on its face; who will speak of the natural language of the deaf-mute, and wonder how there can be an abuse by him of that which constitutes his native vehicle of expressing thought.

It was a grand achievement of De l'Epée, when he grasped the crude pantomimic utterances of his first two pupils, and, making their difficulties his own, built up a language of gestures, by means of which he might place himself in ready communication with the class of persons to which he devoted his life. And Hill, of Weissenfels, speaks truly, when he says of the sign language, "it is the element in which the mental life of the deaf-mute begins to germinate; the only means whereby he, on his admission to school, may express his thoughts, feelings and wishes; hence, at first, the only, and, consequently, indispensable means of comprehension between teacher and pupil;" and, again, "the most convenient, quick, and certain means, in many cases, of making one's self understood by deaf-mutes, whether during tuition or out of school-hours."

* It was urged by the writer of this article, in some remarks offered by him at the Indianapolis Convention, that signs might be used to excess in the instruction of the deaf and dumb. He even went so far as to say that, in his judgment, the sign language was a "dangerous thing" in an institution for deaf-mutes.

The announcement of this opinion called forth decided condemnation from several members of the Convention, who expressed their amazement at the suggestion of such an idea. One member, in particular, honored in his profession for a life-long devotion to the cause of deaf-mute education, was especially

Far be it from the writer of this article, to deny to the sign language that position of great dignity and importance, which it deserves, in the instruction of the deaf and dumb.

Indispensable in the early stages of the course, it is of great value at every step. In explanation, in narration, in correction, in discipline, in free social intercourse, and, above all, in the imparting of religious and moral instruction, the beautiful language of pantomime supplies a lack, the existence of which contributed, probably, more than any other single cause, to that long enthrallment in ignorance, from which the deaf and dumb have but just emerged.

In advocating the *use* of the sign language, at almost every stage of progress in the training of a deaf-mute, the writer would be counted as second to none; in acknowledging the force, clearness and beauty of expression possible in this language, he would be ranked among its most enthusiastic admirers; while he would, at the same time, maintain, with all respect to those of a contrary opinion, that in the *abuse* of signs, and by this is meant their excessive use, may be found one of the gravest defects under which our national system of teaching the deaf is laboring.

In advancing this idea, no claim is made to novelty; for the early readers of the *Annals* will remember the setting forth of a similar view by the first editor (Mr. Luzerne Rae), in an article published eighteen years ago, in which the ground was taken, that "*a too abundant and too constant use of signs, to the neglect of dactylology and written language, is the grand practical error of the American institutions for the deaf and dumb.*"

earnest in his protest against the new doctrine. He was "astonished that a son of the father of deaf-mute instruction in America could call the sign language 'a nuisance,' or claim that its use in the school-room was 'pernicious.'"

As these words, imputed to the writer, were not used by him, and as the imputation gave rise to a misapprehension of his views by many members of the Convention, he ventures to present in the *Annals*, more explicitly than he could during the heat of extemporaneous debate, his sentiments with regard to the subject indicated by the title of this article.

"By the aid of signs," says Mr. Rae in the able paper above referred to, "we can fill the minds of our pupils, to almost any extent, with the *raw material* of knowledge. We can tell them of things in heaven and things on earth, and we find little difficulty in securing an intelligent reception of what we say. This is well, indeed; but they come to us for something far more essential to their welfare than this alone. They come to be provided with a means of communication with the great world which lies beyond the walls of our institutions; and the years which they spend under our care are spent to little purpose, unless the *language of words* is so far acquired as to put them into close and easy connection with their fellow-men.

"But do they really make this acquisition? In answer, I am compelled to say that the general body of our pupils, after a course of instruction extended over several years, leave our schools with a very imperfect knowledge of the language of books and of men. There are exceptional cases, it is true, but I am speaking now of the common mass. The style of the deaf and dumb is almost universally crude, uncouth and ungraceful; and to those not already familiar with its peculiarities, it is often well nigh unintelligible. Their capacity, also, of understanding the language addressed to them, if it passes beyond the simplest forms, is almost equally imperfect. These facts are notorious. They have often been marked and lamented."

Thus wrote one of the ablest and most successful members of our profession half a generation ago. Himself a teacher for more than twenty years, for six years editor of the *Annals*, and the instructor of the first High Class organized in this country, Mr. Rae had opportunities for maturing an intelligent opinion on this subject, that could hardly be surpassed.

And in what will the candid, unbiassed judgment of to-day differ from that of eighteen years ago? Does

"the grand practical error" still hold its place in our institutions? It is with unfeigned regret we find ourselves compelled to say, *We think it does*. If the aphorism of Holy Writ, "By their fruits ye shall know them," may be properly applied to schools for the deaf and dumb; and if the main object of such schools be to place their pupils in intelligent and free communication with hearing and speaking persons through the medium of written language, then must it be admitted, that, with the great mass of so-called educated deaf-mutes, the great end of their school training is far from being attained.

That this failure is, in large measure, attributable to the cause suggested, will, it is believed, be seen by any teacher, who will trace the course of sign usage in our institutions.

As has already been quoted from Hill, the sign language "is the element in which the mental life of the deaf-mute begins to germinate." Is he not allowed to think in signs through the entire term of his residence in the institution? Nay, more, is he not encouraged and taught to do so by the practice of the class-room?

The daily explication, in signs, of the lesson assigned for evening study, is, doubtless, in many cases, an assistance to the pupil, in coming quickly and easily to an understanding of the *meaning* of the text. But will the babe learn to walk, that is always carried in the arms of its nurse?

In the social intercourse of pupil and teacher, the sign language affords, probably, the easiest, and, certainly, the laziest, means of communication. But would that English boy hope ever to master the French language, who should always speak English with his French teacher?

In the mingling of deaf-mutes with each other, undoubtedly the sign language is the channel of thought expression, into which they most naturally glide. But would not the use of dactylology, even though it be at first under compulsion, and adopted reluctantly, tend to fit

them better for those associations into which they must inevitably come after leaving the institution?

Much has been said in favor of the use of what is called the "natural language of signs" with the deaf and dumb, because of its following the natural order of thought.

If to sustain and confirm the so-called natural order of thought in the mind were the object of deaf-mute instruction, then would the above argument be sound. But, unfortunately, our end is to teach our deaf brothers and sisters the use of a language the arrangement of which is entirely at variance with this "natural order of thought;" hence, this similarity, in order, of natural thought and the sign language, is a stumbling-block, not a help, to him who practises both.

And this leads us to say, which we do with some diffidence and yet with strong assurance that we are in the right, that, until a deaf-mute can think freely in conventional language and express his thoughts fluently and correctly in the same, *every instance of the use, by him or to him, of the language of signs in its natural order, impedes his progress towards the great end and object of his education;* for the reason, that every act of the mind which tends to confirm habits of thinking in the so-called natural order, operates against the full assumption by the mind of that artificial order, necessary to be followed in the fluent use of the language desired to be mastered.

What, then, should be the language of signs used in teaching the deaf and dumb? Evidently, a language corresponding in its order of expression, as nearly as possible, to the order of the written language to be taught. But, it will be urged by some teachers, the deaf-mute child comes to school with an order of thought already fixed. We should say in reply: Bear ever in mind, that this "order of thought" belongs to the deaf-mute's state of natural ignorance; that it is the chief barrier to your success in his instruction; that,

if not changed *in toto*, it will remain as a stumbling block through his entire course of study, and on through his life's intercourse with his hearing and speaking brethren.

We are compelled to regard this "natural order of thought," about which metaphysicians have written and teachers of the deaf and dumb have wrangled, as the *ignis fatuus* of deaf-mute instruction. The following of it has certainly left many a poor deaf-mute floundering for life in the morass of half-mastered language, when the less natural, but more sure, artificial light of the conventional order of thought, would have led the benighted traveler into the open country, where full and free communication with his fellow-men might have been secured.

No reason seems to be apparent, why the power of expressing thought in language should not be developed in a deaf-mute as in a hearing child. The latter may become more or less fluent in half a dozen languages at the same time, but his thoughts will flow in that of which he makes the most constant use, and in which he has the most practice, without regard to its conformity, or non-conformity, with any supposed natural order. And so with the deaf-mute. Possessing the language of signs, there is no natural obstacle in the way of his acquiring other languages. But so long as he makes a *much greater use* of the sign language than of any other, so long as he accustoms his thoughts to follow the natural order of signs, will all other languages be foreign to him.

And if it be true, that, in our institutions generally, a much greater use is made of the natural language of signs, than of any other, that it is, in fact, *the* language of the pupil from his admission to his graduation, need we wonder that so few achieve success in attempting to acquire that other language, practice in which is limited to a portion of the hours of school, to labored compositions and occasional letters to par-

ents? Moreover, have we not an emphatic answer, in the affirmative to the question put in the title of this article?

If this be granted, the query then arises, to what extent may signs be properly and advantageously used in the instruction of the deaf and dumb?

To answer this in any general manner would be a difficult task.

In a great degree, each teacher must determine it for himself.

A constant, unyielding resolution should be maintained, to build language upon language. From the moment when the pupil gains command of a few simple expressions, should he be required to *use* them. The teacher also should use them through the medium of dactylogy or writing, and, as a general rule, never employ signs in the class-room, when spelling on the fingers, or written language, will convey with clearness to the mind of the pupils the ideas desired to be communicated.

And, when signs are used, an advantage would seem to be gained, by presenting them, as nearly as possible, in the order of written language, in that the habit of thinking in this order would be thus encouraged.

The great end of deaf-mute instruction, regarded simply in an intellectual point of view, may be briefly stated to be, the enabling of the deaf-mute to think and express his thoughts in the order of written language.

Or, recited more at length, as it is in the article of Mr. Rae. "By far the most important acquisition which the deaf-mute can make, is the knowledge of written language. A knowledge, not only of the significance of isolated words, but of words in all their various relations to each other. A knowledge which shall enable him to understand, clearly and quickly, whatever is addressed to him, and to convey his own thoughts and feelings in a free, correct and natural manner. Having this, the deaf-mute holds the master-

key, by which to unlock the richest treasures of recorded science; and, if the will is not wanting, there is nothing to hinder him from carrying forward the great work of self-education to the highest mark of human attainment."

The writer of this article is constrained to fear, that the number of deaf-mutes graduated from our institutions, who attain to the standard set up by Mr. Rae, is a very small minority of the whole. He believes that the number may be increased so as to include a large majority. He believes that a vigorous reform in the direction herein indicated would contribute greatly to bring about this happy result. He therefore earnestly commends the subject to the attention of the readers of the *Annals*, and hopes that this imperfect presentation may elicit practical suggestions, and lead to practical results, which may be for the real advancement of the cause dear to us all.

GUILTY, OR NOT GUILTY?

[Dr. Peet, in his valuable treatise upon the *Legal Rights and Responsibilities of the Deaf and Dumb*, mentions briefly the case of a deaf-mute named Johann Schmidt, who was tried for murder in the year 1829, in Cologne, Prussia. We find in the *Organ* of the German institutions the following narrative of the event and the trial, taken from the *Illust. Familien Journal*. Notwithstanding the dramatic form in which the story is told, the account is, we dare say, in accordance with the facts, as brought out at the trial. The peculiar circumstances which led to the fatal act, and the way in which they combined with the deafness of the accused to involve the question of his accountability, render the case one of unusual interest.—ED. ANNALS].

One day in December, 1828, a young man entered the Shoemakers' Inn at Bonn. The inn-keeper greeted him courteously, but received no reply to his friendly words. As he gazed with astonishment upon the silent visitor, the latter drew from his pocket, and handed to the host, a tablet, upon which were written these words: "I am a deaf-mute journeyman shoemaker. My name is Johann Schmidt. I want work."

"It is a deaf and dumb man!" said the inn-keeper to his wife, who came to look at the strange guest.

"Poor fellow!" she replied, "And traveling on foot at this season of the year!" With these words she led the half-frozen youth to the warm corner by the stove, where she herself had been sitting.

"It will be very hard for him to get work here at present," resumed the host; "I do not know of any one who is in want of a journeyman now."

His wife replied: "Shoemaker Fuhrer was inquiring after a workman only to-day; but it would be a great pity for this handsome youth to come into the hands of such an inhuman wretch as he is. He almost killed his last three journeymen."

At this moment the door opened, and a soldier entered. As soon as the deaf-mute perceived him, he sprang up and rushed into his arms, his countenance and gestures expressing great delight.

"It is my brother," explained the soldier; "he had written to me that he would arrive here to-day. Can he get work in this place?"

The inn-keeper said that he had just been speaking with his wife on that very subject, and gave him the particulars more fully.

It was a sad story.

Fuhrer, the shoemaker, was a passionate, violent man. Continually growing poorer and poorer, he had taken to drinking. Already he had become such a slave to the habit, that he could not go to work in the morning until he had had his glass of brandy,

and he never came home without being completely drunk. When in this condition, the man was terrible; he knew neither wife nor children, and abused them frightfully.

On one occasion, a policeman had endeavored to restrain him from abuse of his children; but even more enraged by this interference, he had laid violent hands upon the policeman, and had been punished for it with imprisonment.

The unhappy man's temper was made still worse by this.

Similar offenses being repeated, he was finally sent to the penitentiary.

The man grew ever worse and worse.

Then about Easter-time, in the year 1828, a change for the better came over him for a while. He wished to go to confession, but, on the way thither, he could not resist the temptation to take a drink of brandy. After he had poured down several glasses he went into the church. Soon he lay snoring before the confessional. A neighbor endeavored to arouse him; the drunken man fell upon him with curses and it was with difficulty that he was removed from the church.

He was again sentenced to imprisonment, and returned to his home more furious than ever.

At last the man had become like a wild beast. His landlord dared creep into his own house only stealthily by night; for once, when he had reminded Fuhrer of the rent, the latter had threatened to stab him.

Now the wretched man could no longer obtain a single journeyman, and he was the only shoemaker in Bonn who was in want of one at this time.

"Suppose" said the soldier, after long deliberation, when the inn-keeper had finished this unpromising account, "Suppose we yet give him a trial. In the meantime perhaps another master will be found, and at any rate I shall always be near my brother to assist him." "You try it upon your own responsibility,"

said the hostess; "God forbid that I should ever send a man to this monster."

The soldier went with his brother to Fuhrer, who was glad to get the journeyman, for he had no choice. He promised to treat him with kindness. The first day passed smoothly; the new journeyman was an industrious and skillful workman. On the second day, however, he happened to let a boot fall. The master, who had not seen it, thought it was his son that had dropped the boot, and seizing a heavy pair of iron tongs, he hurled them at him with frightful gestures. The deaf-mute was so terrified that he sprang from his seat, and then fell to the floor, bruising his head and elbow somewhat. A few days later, a similar scene was repeated with the same son, a lad thirteen years old. The boy, in ripping the seam of a boot, had cut into the leather. Then a blind rage came upon the master; the poor boy was beaten half to death, and finally escaped further injury only by slipping from the hands of the furious man, and rushing out of the room and out of the house. Again, another time, in Johann Schmidt's presence, the inhuman father beat in a frightful manner his youngest child, only two and a half years old. The child, who was Johann's favorite, had taken up something which he had been forbidden to touch. Every blow that the father struck, went to the heart of the journeyman; he trembled for the child's life.

These events filled the soul of the deaf-mute with a deep horror. In the evening he went to the inn, and narrated to those present what had taken place, endeavoring to make it intelligible to them by the most vivid pantomime. A shoemaker who was there then informed him, by signs, that, a short time before, Fuhrer had also wounded one of his journeymen with a knife, and warned him, in intercourse with this evil man, to be exceedingly cautious.

From this time, the poor fellow knew no peace of mind. Ever before him he saw his furious master,

standing with the knife in his hand, and threatening his life.

So they came to the day before Christmas. The deaf-mute, as usual, was punctually at his work, and, in continual fear of the master, was straining every nerve to its accomplishment.

In the course of the morning, he was visited by his brother, the soldier, to whom he communicated what he had been told by the shoemaker at the inn, and complained bitterly of the cruel man, who was over him. His brother endeavored to quiet his fears, and promised to try to find him another master.

Meanwhile, Fuhrer had gone out, and when he returned, after an absence of about an hour, Johann thought that he perceived the fumes of brandy. His alarm increased more and more; he had a foreboding that something terrible would happen that day.

The master sat down upon his bench, examined Johann's work, and found fault with it; most unjustly, as it seemed to the journeyman, who said, in reply, that better work was done in Mayence than in Bonn. This contradiction was sufficient to throw the man into a passion. He rose from his bench and walked over to Johann, in order, as he said, to show him what good work was. Then it seemed to the deaf-mute that his last hour had come; he grew dizzy; he almost lost consciousness, as he beheld the glaring eyes of the terrible man.

To escape this sight, he looked away from the master. This made the man still more angry. He seized Johann by the breast, and turned him around violently. The deaf-mute gave himself up for lost, for, in the hand of the enraged shoemaker, he believed that he saw a gleaming knife.

Dark night came upon his mind; convulsively he grasped the sharp knife which lay on the bench before him, and, without knowing what he was doing, plunged it into his master's breast.

With the terrible cry: "Jesus, Holy Virgin, Joseph! The man would murder me," Fuhrer rushed out of the room, and fell dead in the hall.

His wife and a fellow-workman took the knife from the deaf-mute.

Soon some policemen came to lead him to prison. He accompanied them without opposition, for he did not yet know that he had killed the master.

At the moment of the deed, dark night had come upon his soul. It was not until towards evening, that he learned from his brother what he had done. He had no idea how he had come to do this act. He finally concluded that Fuhrer had intentionally thrown himself upon the knife, in order to be revenged upon him and bring him before the courts; that God had guided his hand, and the blow was God's punishment for all the evil the violent man had done.

In the autumn of the year 1829, Johann Schmidt was tried before a jury at Cologne.

We follow here Venedey's narrative as given in his *History of the Trial by Jury in the Provinces of Rhenish Prussia*.

At the beginning of the proceedings, Mr. Gronewald, the teacher of the deaf and dumb in the institution at Cologne, was sworn as interpreter. But only the merest outline of the proceedings could be communicated by signs to the prisoner.

The question had been submitted to the physicians of the court, Whether deaf-mutes, in general, were capable of committing crime, and whether the accused, Johann Schmidt, in particular, was responsible for this deed?

The chief physician of the district had answered these questions in the negative. He was of the opinion that the deaf and dumb must always remain at a point of development below that of hearing and speaking persons, and that they stood almost on a level with the feeble-minded.

“For all intellectual conceptions,” said he, “as of possibility, cause, right, duty, crime, discretion, are unknown to them. But it is these conceptions which are relied upon to restrain men from unlawful acts, since it is through them that they obtain a knowledge of the inherent principles of action and forbearance. Of the deaf-mute, then, correct ideas of right and wrong are not to be expected; if he does anything unlawful, he does not act with the understanding of a man who knows that the deed is unlawful; but he acts in the ignorance resulting from a defect of nature, and he cannot be held responsible for its consequences. So in the case of the accused. Feeling that he was judge in his own cause, incapable of expressing his wrath in words, already accustomed in the use of the sign language to violent motions, he united in himself all the qualities for the blind ungoverned guidance of the instrument of death, and lacked all those that could deter him from the deed.”

The public prosecutor refused to admit the force of this reasoning.

“The deaf and dumb understand perfectly,” he said, “what right and wrong mean, and every one of them gradually receives, from the circumstances by which he is surrounded, an education, which makes it clear to him, that certain actions, above all murder and man-slaughter, are crimes, which God and society punish most severely. This deaf-mute, in particular, belonging to a family of intelligence and education, though he has enjoyed no systematic teaching, has received full instruction upon these points. His brothers imparted to him the idea of right and wrong, of good and evil; they taught him the immortality of the soul, and the knowledge of an all-ruling, rewarding and punishing deity. They took him once to see a man who had been struck by lightning, and explained to him that God had done this. His brother Andreas testifies, that, even in the most violent sallies of passion, a reference to the

God above brought peace and gentleness into his soul. Upon the death of his father, he found consolation only in the declaration that he whom he mourned was still alive, and was in heaven. From all this, it is evident that he had a comprehension of a divine being who rewards and punishes.—Under such circumstances, and in view of the natural intelligence of the accused, the solution of the question, whether he is accountable, can no longer be difficult. It is not a question of abstract ideas, but of the practical feeling of what is right and what is wrong. The value of human life is written deep in every man's soul. And if this be true, then is the prisoner accountable for this act, and must be punished.—We have seen that in the presence of the corpse he grew pale indeed, but expressed no contrition; on the contrary it was remarked that he acted as if he had done no more than was right, and under similar circumstances would do the same thing again.—His former blameless life has nothing to do with the present case; he has committed the deed, he knew the law, "Thou shalt not kill!" He knew that murder and man-slaughter are punished, alike by God and by man.—Since I am convinced, gentlemen of the jury, that the deed will be judged by you fairly, from all sides, I leave the result of the prosecution in your hands."

Then the advocate, who defended the prisoner, spoke, and endeavored to overthrow the arguments of the prosecutor.

"The deaf-mute, whether educated or uneducated, always remains to us an enigma. What assurance have we that the accused now standing here receives a correct idea even of the present proceedings, that he understands the interpreter and that the interpreter understands him?—The accused must be regarded as a child, standing upon the lowest stage of development. In the case of a person fifteen years of age, who is endowed with all his faculties, the law doubts whether he is accountable; but the accused, in respect to intellectual

development and to responsibility, is not to be compared with a hearing person fifteen years of age.—The laws are not known to the accused, and no one can be tried by laws which he does not know.—The peculiar circumstances of the accused offer still another point of view, for the consideration of the case, namely, that at the moment of the deed he was acting in self-defence; that he was really attacked by Fuhrer, or, at least, that he believed he was attacked, and thought he had to defend his life. He believed that Fuhrer wished to murder him, and the blow of his knife was the involuntary consequence of this belief. The respective characters of the men fully sustain this view. Consider, gentlemen of the jury, the wild and savage life of the master, who spared not his own family; to whom even the house of God was not holy; who had already dangerously wounded one of his journeymen. Is it at all to be wondered at, that, when attacked by such a man, Johann Schmidt supposed that Fuhrer was threatening his life, and believed that he was capable of any evil deed? He did believe this, and in this belief rests his innocence, if the fact that he is deaf and dumb is not alone sufficient to acquit him.”

The president of the court summed up the result of the proceedings, and submitted to the jury the following questions:

1. “Is the accused, Johann Schmidt, proved guilty, of having, upon the 24th day of December, 1828, killed his master, Anton Fuhrer, the shoemaker, by the blow of a knife voluntarily inflicted?”

2. “Is it proved that to the deed specified in the first question the accused was provoked by blows or any other violence?”

The jurymen withdrew.

The accused sat quietly in his place, and followed with his eyes the men upon whose decision his life depended. A murderer does not have that quiet look.

At the end of half an hour, the jury returned with the verdict, *Not Guilty!*

The audience greeted this decision with loud and jubilant applause, but the deaf-mute, on the contrary, remained quiet, when the result was made known to him. In his opinion it could not have been otherwise; he felt that he was innocent. For the jurymen, this declaration of his had been sufficient: "Dark night came upon my mind; which, perhaps, God may have caused for the punishment of the master."

SACRED SILENCE.

TO THE EDITOR OF THE ANNALS:

I find the following lines in a country newspaper with nothing to indicate their source or authorship, but as they have been a message of comfort to one heart, shrouded in a life-long silence that often seems more sad than "sacred", I send them to you in the hope that others may find in them similar consolation.

M. T. P.

Never with blasts of trumpets
And the chariot wheels of fame
Do the servants and sons of the Highest
His oracles proclaim;
And when grandest truths are uttered,
And when holiest depths are stirred,
When our God himself draws nearest,
The still, small voice is heard.

He has sealed with his own silence
His years that come and go,
Bringing still their mighty measures
Of glory and of woe.
Have you heard one note of triumph
Proclaim their course begun?
One voice of bell give tidings
When their ministry was done?

Unheralded and unheeded
His revelations come,
His prophets before their scorners
Stand resolute and dumb!
But a thousand years of silence—
And the world falls to adore,
And kiss the feet of martyrs
It crucified before!

Shall I have a part in the labor,
In the silence and the might
Of the plans Divine, eternal,
That he opens to my sight?
In the strength and the inspiration
That his crowned and chosen know?
Oh well might my darkest sorrow
Into songs of triumph flow!

For I hear in this sacred stillness
The fall of angelic feet—
I feel white hands on my forehead,
With a benediction sweet;
They say to me, "Labor in silence—
For dearer to God are the songs
Of one loving and earnest spirit
Than the pæans of joyful throngs."

The rivulet sweetest murmurs
Afar in the forest glade,
And the nightingale wild warbles
From depths of leafy shade:
So the poet sings most divinely
From the noisy crowd apart,
And the lays most worthy of laurels
Are those he hides in his heart.

Oh, I hear in this sacred stillness
The fall of angelic feet,
I feel white hands on my forehead,
With a benediction sweet;
No echo of wordly tumult
My beautiful vision mars;
The silence itself is music,
Like the silence of the stars!

SKETCH OF THE LIFE AND CHARACTER OF ABRAHAM B. HUTTON,

LATE PRINCIPAL OF THE PENNSYLVANIA INSTITUTION FOR THE
DEAF AND DUMB.

BY B. D. PETTENGILL, PHILADELPHIA.

Abraham Bloodgood Hutton was the eldest son of a highly respectable merchant of Albany, N. Y., in which city he was born December 10th, 1798. Being of a studious turn of mind and of a religious disposition, he was destined to the Christian ministry, and, at an early age, became a member of Union College, Schenectady, N. Y., where he was graduated with the class of 1817. Subsequently, he commenced a course of theological study at the Seminary at Princeton, N. J. Whilst there pursuing his studies, he was attacked by an affection of the throat, which threatened to render him incapable of filling the position of a public speaker. He was, therefore, induced to listen to a call to become an instructor in the Pennsylvania Institution for the Deaf and Dumb, which had then but just been established, and was now commencing active operations. He accepted the offered situation, entered with zeal upon his new duties, and soon evinced an especial adaptedness to the peculiar work which he had undertaken. In sign-making, drawing, and chirography, he was pre-eminently skilled. He was ingenious in devising methods to reach the minds of his pupils, and exercised unbounded patience and perseverance in instructing the dullest and most stupid. He loved the work, considered it a missionary field of labor, and determined to devote his life to the cause of deaf-mute instruction. He was not without occasional hints, from ambitious friends of his, that teaching the deaf and dumb was too humble an employment, for a man of his abilities and accomplishments; but Mr. Hutton could never be brought to take such a view of the work in which he was engaged. He deemed it one requiring, for its successful prosecu-

tion, all the powers of the most gifted minds, and demanding in the teacher an education and cultivation most varied and complete. He honored the employment to which Providence had called him, and ever considered it a most honorable one.

He had a Quaker-like love of tranquillity and peace, and an antipathy to all kinds of display, excitement and bustle; he discouraged all rivalries among his pupils, and endeavored to excite them to diligence in study rather from the love of knowledge, than to obtain a high rank in the class, or to attain to distinction in the world. He was highly successful as an instructor, and the results of his labors were fully appreciated by the board of directors of the institution, who, upon the resignation of Mr. Weld, as principal, unanimously elected Mr. Hutton to fill his place. He accepted the appointment, and discharged the duties of the position with great discretion, excellent judgment, and marked success, for the long period of forty years. He pursued the path of Christian duty to which he was called, with cheerful activity, steadfast devotedness and untiring industry, faithfully, unto the end of life, neither looking to the right hand or the left, and died with his harness on. During his administration of the affairs of the institution, more than a thousand pupils enjoyed the benefits of his instruction and guidance, a great majority of whom have, in a great measure through his training and counsels, been raised from a condition of ignorance and degradation, to become intelligent and respectable members of the community. Mr. Hutton, though never wanting in the faithful discharge of the sterner duties of his position, was always popular and beloved both by his assistants and pupils. As a disciplinarian, he ruled rather by love than by fear, and made those under him subject to his will more by quiet invisible moral influences than by an open show of authority. Probably no large institution in the country was ever, for such a length of time, conducted

more smoothly and harmoniously, with fewer outbreaks, with less opposition to the ruling powers, and with a greater exemption from rivalries and bickerings among the subordinates. Mr. Hutton, though liberal with his own purse, was economical, even to parsimony, in the disposal of the property of the institution. It is believed that not even a sheet of paper, belonging to the institution, was ever used by him, or by his permission, for any other than strictly institution purposes. A large part of his personal salary was annually expended in contributing to the comforts and amusements of the pupils, almost his whole time was devoted to their benefit, and he never begrudged any personal labor or expense which might advance their interests.

Until the last two years of his life, Mr. Hutton enjoyed remarkable health, and, in scarcely a single instance previous to that time, was he, during his residence in the institution, precluded from performing any duty through illness; but in the summer of 1868, when he had nearly attained to seventy years of age, the state of his health gave such indications of a general breaking up of his physical constitution as to alarm his friends. He rallied in some degree, and, though he was still somewhat feeble, hopes were entertained that his useful life might be spared to an advanced old age. At the commencement of the late vacation, though somewhat ill, he persevered in the performance of his duties with his usual activity. On the 13th of July, most of the pupils having gone to their homes, leaving the institution in charge of one the teachers, he started for Stuyvesant, N. Y., proposing to pay a visit of some three weeks to his sister, whose residence is in in that place. During the week in which he remained there, his health was somewhat feeble, but there seemed to be no especial cause for alarm. On Monday, the 18th of July, he ate dinner with his usual appetite; but in the afternoon became so unwell as to be obliged to take to his bed, and at ten o'clock in

the evening he expired without a struggle. The immediate cause of his death is not certainly known; probably, it was simply from exhaustion of the vital powers and general physical decay.

It now remains for the writer to attempt some brief estimate of the character and services of Mr. Hutton.

Mr. Hutton was below the medium size in stature and was of slender person, weighing, when in the best of health, probably not more than one hundred and thirty pounds. His features were regular, his form well proportioned, and his whole personal appearance dignified and pleasing. He was never married; not that he was insensible to the pleasures of a home, but that circumstances did not seem to require him to set up a domestic establishment of his own—the institution was his home, and its pupils his children.

His manners were courteous and polished. In social intercourse, his refined courtesy and suavity often captivated those who made his acquaintance, and won their admiration and lasting regard. In communion with intimate friends, his cheerful temper and pleasant smile scattered sunshine all around him. He was reticent in speech, so far as regards all matters of private concern, and was remarkably retiring in his habits, never appearing in public, nor even making a social visit among strangers, without the greatest unwillingness. He was unfeignedly modest and unostentatious: no one ever heard from his lips a word of self-commendation; he never boasted of any success that he had accomplished, nor of any good deed that he had performed. As a scholar, he took especial pleasure in scientific investigation, kept himself well-informed as to the latest discoveries in science and the arts, and delighted in devoting his leisure moments to philosophical experiments. He was a finished writer, and possessed uncommon delicacy of literary taste, but was so diffident of his powers in this line of effort, that he rarely and unwillingly attempted any extended piece of composition. From his early

youth he was a consistent member of the Presbyterian church, was zealous in laboring and praying for the spiritual welfare of his pupils and friends, and maintained, under all circumstances, an exemplary Christian walk and conduct. He had no small vices, never used tobacco nor wine, and was exceedingly abstemious both in food and drink. He never evinced any desire to be rich, except in good works, and was totally unambitious of distinction among men, the good deeds to which his whole life was devoted ever bringing to him their own reward. Consequently, he never—as too many do—endeavored to make his deeds of charity stepping-stones to personal fame; he never caused a trumpet to be blown before him when he had performed a benevolent act, nor sought to have his name and achievements blazoned abroad in the newspapers. He was generous even to a fault; he could not listen to a tale of woe unmoved, and it was hard for him to refuse pecuniary aid, even to applicants who were unworthy. He had regular pensioners on his bounty, and in many a poor man's home his name was daily blessed. In three particulars, he excelled all men with whom the writer has ever been acquainted; viz., in discretion in speech, in prudence in action, and in a spirit of genuine charity and good-will towards all with whom he was conversant. He was a man who suffered long and was kind, who envied no one, who vaunted not himself, and was not puffed up. He never behaved himself unseemly, and was not easily provoked. He was not inclined to suspect evil of any one, he hoped all things, he bore all things, and in all these respects he never failed. His whole life, like that of his Divine Master, was spent in doing good, in endeavoring to enlighten the ignorant, reclaim the vicious, and relieve the sorrows of the distressed; and, like our Great Exemplar, his injunction ever was, "See thou tell no man." But such a man could not remain entirely undistinguished and unappreciated—whilst he lived he was admired by

all that knew him, for his accomplishments, esteemed for his many virtues, and beloved for his goodness of heart and life. Now that he is gone, his memory will long be cherished by numerous attached friends, who enjoyed the pleasure of his society, by hundreds of pupils who reaped the benefits of his instructions and counsels, by scores of the poor and afflicted who will miss his benefactions and consolations; and he will ever hold a high place among those American philanthropists who have done the most by their labors to elevate the condition of that unfortunate class of our fellow-beings, the deaf and dumb.

NECROLOGY.—GEORGE HUTTON.

BY HARVEY P. PEET, PH. D., LL. D., NEW YORK.

British America presents a fourth* name to add to our record of distinguished instructors of the deaf and dumb,* who have recently died; that of *Mr. George Hutton*. This eminent philanthropist and sincere Christian was born in Perth, Scotland, January 4, 1801, and died at Halifax, Nova Scotia, February 24, 1870, at the age of 69. His history recalls the essays of those benevolent early laborers in the field of deaf-mute instruction, whose memory we revere as the founders of our art. Half a century ago, when there were but two or three schools for the deaf and dumb in Great Britain, and the Braidwood family were endeavoring to maintain a monopoly of the art, Mr. Hutton, a young assistant in a Scottish parochial school, had his sympathies enlisted by the utterly destitute condition, in respect to intellectual, moral, and, especially, religious instruction, of some deaf-mutes in his vicinity.

*The other three referred to are Laurent Clerc, John A. Jacobs and Abraham B. Hutton. See the last volume of the *Annals*, page 245.

Denied access to the only existing school in Scotland, and thus thrown entirely on his own resources, he carved out a path for himself, carrying on, under extraordinary difficulties and disadvantages, the instruction of his deaf-mute pupils, along with a promiscuous school of hearing and speaking children. Success under such circumstances is a very striking evidence of zeal and ability.

About ten years since he came to Halifax to visit his son, who had become principal of a young and struggling institution in that place, and was induced to remain, giving his services for several years without compensation.

His "mimography," or method of fixing on paper the elements of the sign language, a project on which some of the greatest intellects in our profession, Bébien, for instance, have labored with but unsatisfactory results, if it shall bear the test of experience, will prove a great boon to the art of deaf-mute instruction.

MISCELLANEOUS.

BY THE EDITOR.

The Educated Deaf-Mute's Compensation.—The lines entitled "Sacred Silence," which a correspondent sends us—herself one of "God's silent singers," whom the closing stanzas of the poem most fitly describe—recall the practical application of their leading thought made by the late Hon. Amos Kendall, in an address delivered at the commencement of the National Deaf-Mute College, in the year 1869, a few months before his death. Speaking of the opportunities of culture which the College offers to the deaf and dumb, he said:—

"It is an accepted proposition that, the brain being unimpaired, the destruction of one of the senses

renders the rest more acute. If the sight be lost, the hearing becomes more distinct; if the hearing be lost, the eye becomes more clear and piercing. Why then may it not be, that persons deprived of hearing are more fitted to excel in some branches of learning than those in the full possession of all their senses? Silence and seclusion are conducive to study and meditation. In the silence of the night the astronomer can best study the heavens. In the silence of the desert and cave the hermit can best meditate on the vanities of life and the attributes of God. And is it unreasonable to hope that men whose atmosphere through life is silence, may, if allowed the benefit of a superior education, become prominent in all those branches of learning to the acquisition of which silence is conducive? Why may we not expect to find among them our most profound mathematicians and astronomers, our most clear thinkers and chaste writers, our most upright men and devoted Christians?"

An idea somewhat akin to this is suggested by Ralph Waldo Emerson, in his essay on "Society and Solitude," where he says:—

"Few substances are found pure in nature. Those constitutions which can bear in open day the rough dealing of the world must be of that mean and average structure,—such as iron and salt, atmospheric air, and water. But there are metals, like potassium and sodium, which, to be kept pure, must be kept under naphtha. Such are the talents determined on some specialty, which a culminating civilization fosters in the heart of great cities and in royal chambers. Nature protects her own work. To the culture of the world, an Archimedes, a Newton is indispensable; so she guards them by a certain aridity. If these had been good fellows, fond of dancing, port, and clubs, we should have had no 'Theory of the Sphere,' and no 'Principia.' They had that necessity of isolation which genius feels. Each must stand on his glass tripod, if he would keep his

electricity. Even Swedenborg, whose theory of the universe is based on affection, and who reprobates to weariness the danger and vice of pure intellect, is constrained to make an extraordinary exception: 'There are also angels who do not live consociated, but separate, house and house; these dwell in the midst of heaven, because they are the best of the angels.'

Remarkable Cases.—The *Norwich* (Conn.) *Daily Advertiser*, of Sept. 19, 1870, contained the following paragraph:—

"Can the deaf and dumb be made to hear and speak? Mrs. Lucretia Bradley Hubbell is now solving this question by treating a young man, a compositor in this office. This young man is twenty years of age, and has never, up to this time, heard a sound of any kind, or uttered a sound. He is a graduate of the Asylum at Hartford. For a week or two past Mrs. Hubbell has treated him psychologically and medically, and now he hears the sounds of the human voice distinctly, and imitates them with a precision perfectly astonishing. So far we speak of what we have seen and know. Mrs. Hubbell says she can certainly restore him to speech and hearing perfectly. We shall watch the case with great interest, and report progress."

Immediately upon reading the above, we wrote a letter to the editor of the *Advertiser*, asking a number of questions in regard to this singular statement, and received from him the reply that he "really knew very little of the case." He however gave us the name and address of the deaf-mute referred to, the address of Mrs. Hubbell, and some other information which corresponds perfectly with the statements since received from the deaf-mute himself. From the deaf-mute, whose word, we are informed by some of his former associates at Hartford, may be fully relied upon, we have obtained the following particulars. He is twenty years old; was born totally deaf, and up to

the time of his treatment had never been conscious of hearing the least sound; he had never attempted to articulate, or to understand from the motion of the lips. He cannot now hear ordinary conversation, nor distinguish between different words unless he sees the motion of the lips; but he can hear loud noises, as the sound of a piano, or the human voice speaking in a loud tone. Some letters of the alphabet, as I, O, M, R, N, U, A, B, he can speak quite easily; but H, G, C, and others which require the hissing sound, demand an extra exertion. He can speak quite readily the words *Good-bye, Good-night, Good-morning, I am well, etc.* Mrs. Hubbell writes a more glowing account of the case, but we are inclined to make considerable allowance for her enthusiastic temperament, and not to accept any stronger statement than that of the young man himself, as given above. She says that two days after she began the treatment, she "spoke to him in an ordinary tone of voice, and he heard and conversed with ease, notwithstanding his organs of speech were stiff and awkward. He learned the entire alphabet and spoke it in two hours; and several words and sentences." Of the course of treatment, Mrs. Hubbell gives the following description: "His sister brought him to me, saying that he had never been well, and asked me what I could do for him. I told him to sit in a chair and I would show him what I could do for him. I then placed my hands upon his head and ears, until I placed him perfectly in the electro-psychological state. I then spoke to him and he heard a low faint sound, the first he had ever heard in his life. I prepared drops and used them in his ears, and used a wash upon the whole head, that restores the nerves and brains to a healthy action; I also made applications to the whole surface of the system and applied internal remedies to produce a healthy action." Mrs. Hubbell does not profess to be able to cure all cases of deafness; "if the patient were of a dull temperament, it

would be impossible for her to bring him into harmony with her own mind, in order to effect a cure."—From all the statements taken together, it is evident that the results produced, thus far, are of little practical value; whether the hearing of the young man can be retained and further improved so as to be made useful to him, remains to be seen. Mrs. Hubbell is sure that "if she could be with him constantly, she could teach him to converse with as much ease and beauty as any one." Whatever the final result may be, it is certainly very wonderful that any body, by any means, should have been able to produce the effects described above—that a person born totally deaf should acquire the least power of hearing; we shall endeavor to keep ourselves informed of the case in the future, and report it in the *Annals*.

From the *New York Times*, of August 19, 1870, we clipped a paragraph, mentioning an instance of the restoration of hearing; but letters addressed to the individual mentioned, to the postmaster and to a clergyman of the town where he was said to reside, have all failed to elicit any information on the subject. The paragraph was as follows: "Wilbur Merrill, of Charlestown, N. H., recovered his hearing during the recent thunderstorm. He had been deaf from childhood."

The story which went the rounds of the newspapers a while ago, to the effect that a young man in Alleghany City, Penn., lost his speech by the explosion of a fire-cracker on the last Fourth of July, admits of an easier explanation than either of the cases mentioned above. It turns out that it was a written speech that he lost. The speech was in his pocket, and took fire from the fire-cracker.

A Japanese Letter.—The following letter was written by a Japanese official, who had received an English education. It was sent in acknowledgment of a photograph of an American steamer, and an invitation to dine on board of her.

"SADO 6th, August, 1870.

"My dear Sir,

"I am very much obliged to you for present very beautiful a photograph of your ship this morning to me, and I should have any longer to keep and delight myself for rare and costly.

"I accept for your kindly invitation at one o'clock to morrow to your steamer and then my officers are pleasant to see you as well as my happiness.

"I have the honor to be, my Lord,

"KATO DAISANZI.

"To Esqr. JOHN C. HUBBARD."

The Growth of the Institutions.—We present elsewhere in this number a tabular statement of the American Institutions for the Deaf and Dumb at the present time. For the sake of comparison, we give here a statement of the number of the institutions in the United States, with the number of pupils and teachers, drawn from such tables of previous years as are conveniently at hand.

Date.	Number of Institutions.	Number of Pupils.	Number of Teachers.
1857	20	1721	95
1863	22	2012	
1866	24	2469	119
1867	24	2576	120
1869	27	2898	170
1870	30	3246	187
1871	34	3784	222

The Report of the Liverpool School for the Deaf and Dumb, for 1869, Dr. David Buxton, Principal, announces an attendance of 100 pupils at the close of the year. A part of these are day pupils—what proportion is not stated in the report. Under the control of the officers of the institution, but with a separate treasury, is a benevolent society for the adult deaf and dumb. This assists the deaf-mutes of Liverpool in obtaining employment, cares for them in sickness and poverty,

and renders them such other aid as circumstances may seem to require. Religious service for their benefit is held every Sunday afternoon, and a reading-room is opened for them on Saturday evenings.

The Ontario Institution.—The *Belleville Ontario*, of Oct. 26, 1870, contains an account of the opening, the day previous, of this promising institution, of which Dr. Palmer, late of the North Carolina Institution, is now principal. A holiday in honor of the event was proclaimed by the Mayor of Belleville, and many people assembled from the surrounding country. The Lieutenant Governor of the Confederation of Canada, the Premier of Ontario, many members of the legislature and other prominent citizens were present. Addresses were made, toasts were drank, and an exhibition was given. In the evening there was a ball under the auspices of the Masonic fraternity.

The New York Institution.—The following letter, from the principal of the New York Institution, will relieve the anxiety of some of our readers, who have seen the exaggerated newspaper report to which it refers. While we rejoice that the calamity was not as great as many have feared, we sympathize deeply with our New York friends in their heavy affliction.

INSTITUTION FOR THE DEAF AND DUMB, }
NEW YORK, December 20, 1870. }

TO THE EDITOR OF THE ANNALS:

A wild exaggeration in one of the New York papers has "gone the rounds," creating great alarm and anxiety among the friends of this institution and of its inmates all over the country. The reporter of the paper referred to attended a meeting of the Board of Health, and heard something said about an epidemic of typhoid fever in the institution for deaf-mutes in 162nd street. With the confusion of mind not uncommon in a certain class of "Bohemians," he took the number of the street for the number

of deaths, and people all over the country have seen the startling announcement that there had been 162 deaths by typhoid fever recently among our five hundred pupils!

While the fact reduces this reported mortality more than twenty-fold, the visitation was a very serious one, in fact, the greatest calamity that has fallen on the institution during its half century and more of a career on which very few dark clouds have rested, soon giving place to a greater brightening of the sunshine of prosperity.

The first case was that of a boy from central New York, who had brought the fever with him, dormant, and by us unsuspected, till it broke out. There happened just then, from various causes, to be an unusual predisposition to typhoid fever, in this institution, as during the same autumn in many other parts of the country, and this first case seems to have acted, so to speak, as the spark to a magazine. In a few weeks we had fifty-nine cases, including two employés, about one in ten of our inmates, of whom eight have died, seven pupils and one teacher.

Every thing that medical skill and devoted nursing could do was done for the sick. Nor were we remiss in our endeavors to check the spread of the disease. As soon as the first case was recognized as typhoid fever, the patient was removed to a separate building, which has for years been used by us as a hospital for contagious diseases, and the others followed as fast as they occurred, and when these quarters became too strait for the number of sick, a large unoccupied mansion, on a breezy hill on the property adjoining ours, was hired and fitted up as a temporary hospital. Here the teachers, taking their lives in their hands, cheerfully served in turn as watchers by day and night by the beds of those prostrated by this dreaded disease. I rejoice to say they all escaped except one, Miss Sarah Cuddeback. This estimable lady early took the fever, and thus lost her life in

the performance of a duty of humanity. Her memory will evermore be green among us. I transmit herewith the resolutions by which her associates endeavored to express their sense of her worth and of their loss.

With deep thankfulness we now rejoice that the sword of the destroying angel is no longer suspended over us. With eight precious names, our record of deaths, by this visitation, we trust is filled. Fifty are convalescent, and "Saint Kate's Hospital" closes this day.

At the first alarm of the fever, many of the pupils were taken home by their anxious parents. Others were removed day by day, but the school was still kept up, monitors supplying the place of those teachers who served as watchers with the sick. At last the Board resolved to send home all the pupils who had homes to go to, for a vacation to extend over the Christmas and New Year holidays, to give opportunity for a thorough purifying of the buildings, and for making some improvements in the ventilation. When our school reassembles in January, I trust we shall resume our studies with a vigor that will make up for lost time.

ISAAC LEWIS PEET, Principal.

Resolutions.

At a meeting of the teachers and other officers of this institution, held December 12, 1870, the following preamble and resolutions were unanimously adopted.

Whereas, It has pleased Him who doeth all things well, to take from us, by death, our friend and associate Sarah Cuddeback :

Resolved, That while we mourn her loss and shall miss her valuable aid in our daily work, she has left behind her that which we shall cherish as a rich legacy ; the record upon our memories of a Christian life, of daily duties conscientiously and punctually performed, of sacrifices cheerfully made, and of life itself laid upon the altar of duty.

Resolved, That we extend to her bereaved family in this their great affliction, our most sincere sympathies.

Resolved, That the Chairman be requested to forward to the friends a copy of these resolutions.

ISAAC LEWIS PEET, Chairman.

Miss Cuddeback was from Phelps, Ontario county, New York. She had been connected with the Institution little more than one year. Her interest in the deaf and dumb sprang the fact that she had a brother and a sister deaf-mutes and worthy graduates of the institution.

The College Graduates.—To the question frequently asked, “What is the use of a college for the deaf and dumb?” the answer which we prefer to give, is, that it does much to free them from the disabilities caused by the want of hearing; that it places them more nearly on a level with their hearing and speaking brethren; that it enlarges the scope of their mental activity, gives them a broader culture, and opens to them new possibilities of intellectual enjoyment; that it enables them to exert a wider influence; that it fits them to perform the duties of life more “justly, skillfully, and magnanimously;” that it makes them, in every respect, better men and better citizens. There are, however, many honest friends of the deaf and dumb, who are not satisfied with this reply; they still ask, “But of what *practical benefit* is their collegiate training? What does it enable them to do in the world? What is it worth in dollars and cents?” Such questions as these are perhaps best answered by a simple reference to the positions to which the young men who have thus far graduated from the college have immediately been invited and the remuneration which they are now receiving. We quote from President Gallaudet’s last report:—

“Our first three graduates were at once called to fill honorable and useful positions; one in the service of the Patent Office, one to instruct his fellow mutes in Illinois, and the third to supply a professor’s place, as tutor, in the college from which he had just graduated.

"The young men of our second graduating class have also given gratifying evidence that their collegiate training has been to good purpose. One has been called to teach in the Tennessee Institution for Deaf-Mutes; another has been employed in a similar manner in the Ohio Institution; a third has taken an eligible position as teacher in the new institution for the deaf and dumb in Belleville, Canada; the fourth is a valued clerk in the Census Bureau; and the fifth is continuing his studies here with the view of becoming a librarian, while he fills temporarily the position of private secretary in the office of the president of the institution.

"The aggregate annual income, to-day, of the nine young men who have graduated from our college, is nine thousand six hundred dollars; giving an average of more than one thousand dollars to each."

It is hardly necessary to add that no nine deaf-mutes, in the beginning of their life of self-support, have ever before received a compensation at all comparable to this; indeed, the average of the income of these graduates is higher than that of most hearing and speaking young men of the same age, whether they have had a college education, or not.

The two young men who received government appointments underwent severe competitive examinations, under the rules established by Secretary Cox during his administration of the Interior Department. The one who is spoken of as being employed in the Census Bureau has recently resigned his position there to become Instructor of the High Class in the Virginia Institution.

The services of the deaf-mute college graduates, as teachers, are of course more valuable, and command a higher salary, than those of inexperienced hearing and speaking graduates; for, in addition to a collegiate training, they have the advantage of familiarity with the sign language and the approved methods of teaching the deaf and dumb.

Conventions of the Deaf and Dumb.—Two of these interesting conventions were held last summer; that of the New England Gallaudet Association, which met at Concord, N. H., and the Alumni Association of the Ohio Institution, which met at Columbus, Ohio. At the former an oration was delivered by Mr. J. G. Parkinson, of Washington, and at the latter by Mr. D. H. Stewart, a teacher in the Ohio Institution. The Columbus Convention was also favored with addresses from Dr. H. P. Peet, Rev. Collins Stone, and other gentlemen who stopped at the Ohio Institution on their way home from the Indianapolis Convention. Nothing better illustrates the blessing which education confers upon the deaf and dumb than these reunions of the graduates of our institutions. There are even now, it seems, a few men of high position, who ask, with regard to the education of the deaf and dumb, "What is all this worth?" As was well said by Mr. Fay, Principal of the Ohio Institution, in his address of welcome to the members of the Convention, such a gathering of intelligent and happy persons, who, without the instruction which they had received in the institution, would have been in a condition little above that of the brutes, is a sufficient answer to this question.

Relief for the Alsace Institution.—We gladly give place to the following communication:—

INSTITUTION FOR THE DEAF AND DUMB, ()
NEW YORK, Dec. 27, 1870. ()

TO THE EDITOR OF THE ANNALS:

I have just received a letter from Prof. Kilian, the Superintendent or Principal of the Institution for Protestant Deaf-Mutes in Alsace, France, in which he makes a strong appeal for aid to sympathizers in America. I do not know of any way in which his position can be so "eloquently interpreted," as by a literal translation of his own letter. I will simply add that any contributions that may be sent me in his behalf I shall be most happy to forward. I will also send a

list of the same to the next number of the *Annals*.

Very Truly Yours,

ISAAC LEWIS PEET.

ESTABLISHMENT FOR PROTESTANT DEAF-MUTES, }
SCHILTIGHEIM, (NEAR STRASBOURG), }
ALSACE, FRANCE, NOV. 28, 1870. }

MUCH HONORED SIR AND COLLEAGUE:

The establishment which I have founded, for the benefit of the deaf-mutes connected with the evangelical churches of Alsace, is menaced, in consequence of the Franco-German war, with a crisis of the most disastrous kind. Its very existence is at stake. "To be or not to be, that's the question."

Situated without the gates of Strasbourg, the house has suffered greatly by the shots and shells of the garrison; and occupied during six weeks by twenty to sixty soldiers all its *matériel* has been strangely deteriorated.

By a very great effort, I was able to re-open my institution about the first of November; but the greater part of my pupils having been dispersed, I am reduced to sources of existence so scanty, that I am neither able to meet the dearness of provisions nor the painful sacrifices of this crisis.

Devoted to the same holy cause of suffering humanity, I have dared to count on your brotherly assistance and to address an appeal to your Christian charity. In making yourself the eloquent interpreter of my appeal to generous friends, you may perhaps contribute by their offerings to save my establishment from imminent ruin, and thus assure the future of our Protestant deaf-mutes of Alsace, who will know how to preserve the blessed memory of their American benefactors.

Accept, respected Sir and Colleague, the expression of my distinguished consideration.

The Director,

PROF. KILIAN.

Attempted Murder of Mr. Deutsch.—The *Organ* of the German Institutions describes an attempt made last February upon the life of Mr. J. Deutsch, Director of the Jewish Institution for the Deaf and Dumb in Vienna, one of the most successful and distinguished of the European instructors of deaf-mutes. It seems that a teacher named Isaac Bardach, who had been employed in the institution for about two years, had often been reprov'd by the director for arbitrarily punishing his pupils. On the 17th of February last, Mr. Deutsch's attention was attracted by a great uproar in one of the school-rooms, and upon entering he found Bardach whipping several of the children unmercifully. Mr. Deutsch called Bardach out of the room, reprimanded him severely and threatened him with dismissal. The teacher replied with a torrent of abusive language, whereupon the director announced his dismissal upon the spot, and showed him the door. The next morning Bardach went to Mr. Deutsch's house, and in an impudent manner demanded his salary for the past half month. Mr. Deutsch replied that he would send him the money, but that he did not wish to have any further conversation with him. An angry dispute followed, in which Bardach, disregarding all rules of propriety, overwhelmed the director with the most violent abuse. The latter finally ordered him to leave the room. Bardach thereupon thrust his hand into his breast-pocket, and drawing forth a clasp-knife gave Mr. Deutsch two blows with it in the neighborhood of the breast. While the wounded man called for help, Bardach made his escape from the house, but was pursued by Mr. Deutsch's son, and was finally arrested by a policeman in the Rudolphs-gasse. The wounds which Mr. Deutsch received were thrusts, one an inch and a half and the other two inches in depth. Fortunately they were not mortal, and it was expected that he would soon recover. Bardach was committed for trial.

Trial of an Uneducated Deaf-Mute for Murder.—The *New York Herald* of Oct. 11th, 1870, contains an account of a trial held a few days previous in Kingston, Ulster county, N. Y., at which some of the issues raised were quite similar to those discussed in the trial of Johann Schmidt, described elsewhere in the present number of the *Annals*. Our friend Mr. Noyes, of the Minnesota Institution, will find, in such cases as this, an additional argument for the principle which he advocated at the Indianapolis Convention, and in the last number of the *Annals*—the compulsory education of the deaf and dumb. From the long narrative in the *Herald*, we gather the following particulars:—

Levi Bodine, the prisoner, is an uneducated deaf-mute, eighteen years old. He was born in the Ulster county poor-house, his mother being a negro woman, and his father a white man, at one time a prominent official of the county. The murdered man was Daniel A. Hasbrouck, a gentleman of wealth and influence in the community, to whom the deaf-mute had been apprenticed at the age of seven. Bodine was of a cruel and vicious disposition, as had frequently been shown in his treatment of dumb animals; he delighted in torturing them. He had repeatedly threatened his master's life. The immediate occasion of the murder, which took place last February, was the attempt of Mr. Hasbrouck to compel him to do work which he did not wish to do. He attacked his master with an axe, a severe struggle ensued, in which the deaf-mute, being the stronger, succeeded in throwing the other to the ground; he then deliberately dealt him two terrible blows on the head with the axe. When arrested, he asked, by signs, if he was going to be hung, and began to cry. The indignation of the residents of the neighborhood was so great, that it was with difficulty that they were prevented from laying violent hands upon him, while the officers were taking him to jail.

Before the trial, Messrs. Isaac Lewis Peet, Principal

of the New York Institution for the Deaf and Dumb, and Henry D. Reaves, a deaf-mute teacher in the same institution, visited the prisoner in his cell for the purpose of ascertaining whether he could be communicated with by signs. Being asked about the murder, he showed a ready comprehension of the question, and declared, by vivid pantomime, that he had been attacked first. He inquired, as at the time of his arrest, whether he was to be hung.

At the opening of the trial, the prisoner's counsel claimed that he was unable to communicate with his client in any way; that it was impossible to convey to his mind the different degrees of homicide; that there was no way to inform him of his right to challenge jurors; that he could not be sworn in his own behalf, and that the law provided that no man should be tried who was not, at the time of the trial, able to understand the details of the case and prepare a suitable defence. The district attorney, on the other hand, said that the prisoner's sanity was undisputed; there was no malformation of the brain; the neighbors and acquaintances of the accused were able to communicate with him by signs and make themselves understood. Upon the closing of the arguments, a preliminary jury was impaneled, to determine the condition of the prisoner's mind.

After hearing various testimony upon this point, the most important of which was that given by Messrs. Peet and Reaves, to the effect that they did not consider the prisoner capable of understanding judicial proceedings, the case was postponed until a future session of the court. The *Herald* closes its narrative by expressing the opinion that the prisoner would probably be sent to the New York Institution for the Deaf and Dumb; in reply to this Mr. Peet wrote the following letter, which appeared in the *Herald* of Oct. 18.

“NEW YORK INSTITUTION FOR THE
DEAF AND DUMB, Oct. 17, 1870. }

“*To the Editor of the Herald:*—“In your paper of Tuesday, Oct. 11, you give an account of the proceedings before Judge Hogeboom, at Kingston, Ulster county, in the case of an uneducated deaf-mute arraigned for the murder of his employer, a respectable citizen of that county. The account closes with the statement that the accused would probably be sent to this institution. This announcement may cause some anxiety to the numerous friends of our pupils. You will therefore permit me to say, through your widely circulated paper, that it is a misapprehension; and I trust this correction may be as widely read as the error. No individual guilty of serious crime against the person, or showing symptoms of insanity, can, by the regulations of this institution, be admitted as an inmate. But, as the deaf-mute in question has been kept in total ignorance from infancy, that his employer might profit by his unpaid labor, and is now only eighteen years old, and shows sufficient natural capacity, I may suggest that he should be confined in some reformatory school in this vicinity—the House of Refuge, for instance—in which case I should deem it a duty and a privilege to undertake or to provide for his intellectual, moral and religious instruction; not without strong hope that this wild man, who has so fatally exemplified the danger of leaving a deaf-mute of strong natural passions to grow up in ignorance, may yet become a useful citizen and a sincere Christian.

“It ought to be generally known that deaf-mutes, who have been deprived of the advantages of education, now so freely offered at the expense of the State, are liable to grow up a nuisance and a terror to the community in which they are found. The deaf-mute in question, Levi Bodine, was taken from the county poor-house, and, instead of being sent to the institution to be educated, as he ought to have been, was bound

during his minority to the gentleman who has lost his life, in attempting to control by mere personal authority a naturally stubborn and revengeful disposition, which might have been moulded to good-will and cheerful service, by appeals to his better nature, had he been previously placed in an institution, where his mental and moral faculties could be developed by the means used with success in multitudes of similar cases. In the absence of such mental and moral training, the individual necessarily grows up a savage.

"The cases in which a wholly uneducated deaf-mute has been accused of serious crime, have always occasioned much perplexity to the court called to pass upon the degree of his accountability. That an individual, who has shown himself to be dangerous to the community should be restrained from new acts of violence, is evident; but it is equally evident that a deaf-mute who knows nothing of either human or divine laws, is not responsible for his actions, to the same extent as those who have been well instructed.

"Many cases are upon record in which uneducated mutes have been arraigned for grave crimes, including murder, sometimes under aggravated circumstances. In countries where the English common law prevails, the usual course has been to pronounce the prisoner not capable of being tried, and to confine him or her, as in the case of dangerous lunatics, usually equivalent to confinement for life. In France, a somewhat different philosophy prevails. The deaf-mute is tried, and the verdict generally is, "Guilty, with extenuating circumstances." This verdict saves his life, but usually dooms him to perpetual imprisonment, if the case be an aggravated one.

"It is to be hoped that the liberal provision made by our State (and most of the other States of the Union), for the free education of all the deaf-mute children between six and twenty-five years whose parents are unable to procure them an education, will be

so universally embraced, that we shall never again see this sad spectacle of an uneducated deaf-mute arraigned for murder.

ISAAC LEWIS PEET, Principal."

Shooting of a Deaf-Mute.—A deaf-mute named David Broker, a member of the High Class in the Indiana Institution, and a young man of excellent character, was shot Oct. 6, 1870, at a hotel in Indianapolis where he was boarding during the vacation, by a drunken vagabond. The fellow, a stranger at the hotel, went into Broker's room, and, because the deaf-mute did not answer when he spoke to him, drew a pistol and shot him. Broker was, at the time, stooping down and drawing on his boot; a circumstance which probably saved his life, as the ball struck his breast-bone and glanced downward. The ball could not be extracted, and it was thought at first that the wound would prove fatal; but, we are glad to be able to say, it has not, and the young man is now apparently as well ever, and is pursuing his studies in the institution.

Books relating to the Deaf and Dumb.—Mr. Henry W. Syle, of the New York Institution, requests that principals of institutions will forward to him lists of all the works relating to the deaf and dumb, which are to be found in the libraries of their respective institutions. Mr. Syle purposes using the information thus obtained for the benefit of the readers of the *Annals*.

AMERICAN INSTITUTIONS FOR THE INSTRUCTION OF THE DEAF AND DUMB, JANUARY 1, 1871.

NAME.	LOCATION.	Date opening.	CHIEF EXECUTIVE OFFICER.	Number of Pupils in 1870.	Males.	Females.	Number of Teachers.	Male.	Female.	Deaf-Mute.	SCHOOL HOURS.	VACATION.	TRADES.
1 American Asylum,	Hartford, Conn.,	1817	Principal,	294	182	112	16	8	8	5	5 9 to 12 and 2 to 4.	Last Wednesday June to Second Wednesday September.	Cabinet-making, shoe-making and tailoring. [horticulture.
2 New York Institution,	New York, N. Y.,	1818	Isaac Lewis Peet, M. A.,	561	328	233	30	18	12	12	16 8 to 1.	Last Wednesday June to First Wednesday September.	Cabinet-making, carpentering, painting, glazing, shoe-making, tailoring and
3 Pennsylvania "	Philadelphia, Pa.,	1820	Joshua Foster,	225	128	97	11	9	2	2	3 8½ to 11½ and 2½ to 4½.	Last Wednesday June to First Wednesday September.	Tailoring and shoe-making.
4 Kentucky "	Lanville, Ky.,	1823	J. A. Jacobs,	79	46	33	6	3	3	3	3 8 to 12 and 1½ to 3.	August and September.	Gardening.
5 Ohio "	Columbus, Ohio,	1829	Gilbert O. Fay, M. A., Superintendent.	343	203	139	17	8	9	9	9 7½ to 9½, 10 to 12½, 2 to 5.	Third Wednesday June to Second Wednesday September.	Shoe-making, printing and book-binding.
6 Virginia "	Staunton, Va.,	1831	John C. Covell, M. A., Principal.	100	56	44	6	5	1	1	4 8½ to 1½.	July and August and Christmas Holidays.	Printing, shoe-making, cabinet-making and tailoring.
7 Indiana "	Indianapolis, Ind.,	1844	Rev. Thomas MacIntire, M. A., Supt.	246	128	118	13	9	4	4	6 8 to 1, study hours 7 to 9.	Last Wednesday June to First Wednesday after Sept. 15.	Shoe-making, cabinet-making and tailoring.
8 Tennessee School,	Knoxville, Tenn.,	1845	Joseph H. Ijams, B. A., Principal,	99	58	41	7	6	1	1	1 9 to 12 and 1½ to 3½.	June 15 to September 15.	None.
9 North Carolina Inst.,	Raleigh, N. C.,	1845	Principal,	120	65	55	8	5	3	3	5 8 to 2.	July 1 to October 1.	Cabinet-making, shoe-making and painting. [ing and farming.
10 Illinois "	Jacksonville, Ill.,	1846	Philip G. Gillett, M. A., Principal,	293	153	140	15	8	7	7	4 8 to 12½.	June, July, August and September.	Cabinet-making, shoe-making, printing, carpentering, wood-turning, paint-
11 Georgia "	Cave Spring, Ga.,	1846	W. O. Conner, Principal,	57	30	27	3	2	1	1	2 8 to 1, study hours 6½ to 8.	Last Wednesday June to First Wednesday September.	Shoe-making.
12 South Carolina "	Cedar Spring, S. C.,	1849	J. M. Hughston, Principal,	27	11	16	4	2	2	2	1 8 to 1.	November and December.	Shoe-making.
13 Missouri Asylum,	Fulton, Missouri,	1851	Wm. D. Kerr, M. A., Superintendent,	151	67	84	5	3	2	2	3 8 to 1.	First Wednesday July to Third Wednesday September.	None.
14 Louisiana Institution,	Baton Rouge, La.,	1852	J. A. McWhorter, M. A.,	31	17	14	2	2	2	2	2 8 to 1, study hours 7 to 9.	1st Wed. preceding July 20 to 1st Wed. Oct. also, Holidays.	Printing.
15 Wisconsin "	Delavan, Wis.,	1852	Edward C. Stone, M. A., Principal,	141	84	57	8	6	2	2	2 9 to 12 and 1½ to 3½.	Last Wednesday June to First Wednesday September.	Cabinet-making and shoe-making.
16 Michigan "	Flint, Mich.,	1854	Edgert L. Bangs, M. A.,	147	84	63	9	8	2	2	8 9 to 12 and 2 to 4.	Third Wednesday June to Second Wednesday September.	None.
17 Iowa "	Council Bluffs, Iowa,	1855	Rev. Benjamin Talbot, M. A., Supt.,	115	70	45	5	4	1	1	3 9 to 12 and 2 to 4.	Three months from Third Wednesday in June.	None.
18 Mississippi "	Jackson, Miss.,	1856	(Closed).										None.
19 Texas "	Austin, Texas,	1857	J. Van Nostrand, M. A., Principal,	35	24	11	2	1	1	1	2 9 to 12 and 1½ to 3.	Fourth Wednesday June to Second Wednesday September.	Cabinet-making and gardening.
20 Columbia "	Washington, D. C.,	1857	E. M. Gallaudet, Ph. D., LL. D., Pres.,	100	72	28	10	9	1	1	2 8½ to 12½ and 2 to 3.	Last Wednesday June to Last Wednesday September.	Shoe-making, broom-making and cane-work.
21 Alabama "	Talladega, Ala.,	1858	Joseph H. Johnson, M. D., Principal,	55	16	39	3	2	1	1	1 8 to 1.	July, August and September.	Shoe-making, cabinet-making and carpentering.
22 California "	Oakland, Cal.,	1860	Warring Wilkinson, M. A., Principal,	59	33	26	3	3			2 9 to 12 and 1 to 3.	Second Wednesday June to Fourth Wednesday August.	None.
23 St. Bridget's Inst. (Cath.)	St. Louis, Mo.,	1860	Sister Stanislaus, Principal,	25	25	1			1		1 9 to 11½ and 2 to 4.	July and August.	None.
24 Kansas Institution,	Olathe, Kansas,	1862	Lewis H. Jenkins, M. A., Principal,	50	29	21	3	3			1 9 to 12 and 1 to 3.	Second Wednesday June to Second Wednesday September.	None.
25 St. Mary's Asylum (Cath.)	Buffalo, N. Y.,	1862	Sister Mary Ann, Superintendent,	54	22	32	4	4			2 8½ to 11½, and 1 to 4.	July and August.	None.
26 Minnesota Institution,	Faribault, Minn.,	1863	Jonathan L. Noyes, M. A., Supt.,	65	40	25	4	2	2	2	9 to 12 and 2 to 4.	Fourth Wednesday June to Second Wednesday September.	Cooper.
27 Inst. for Impr'd Instr.,	New York, N. Y.,	1867	F. A. Rising, M. A., Principal,	50	27	23	4		4		9 to 12 and 1 to 3.	First Wednesday after June 20 to First Wednesday Sept.	None.
28 Clarke Institution,	Northampton, Mass.,	1867	Miss Harriet B. Rogers, Principal,	38	22	16	5		5		Varying with age pupil.	Four weeks in February and eight in Summer.	None.
29 Arkansas Institute,	Little Rock, Ark.,	1867	Elmore P. Caruthers, M. A., Prin.,	36	21	15	3	4	1	1	2 9 to 11½ and 2 to 4½.	Last Wednesday June to First Wednesday October.	None.
30 Maryland Institution,	Frederick City, Md.,	1868	Charles W. Ely, M. A., Principal,	88	62	26	5		4	1	2 9 to 12 and 2 to 4.	Last Wednesday June to First Wednesday September.	Printing.
31 Nebraska Institute,	Omaha, Neb.,	1869	William M. French, Principal,	21	9	12	2	2			9 to 12 and 2 to 4.	Last Thursday June to First Tuesday September.	None.
32 Pittsburgh Day School,	Pittsburg, Penn.,	1869	Archy Woodsides, Teacher,	20	11	9	2	1	1	1			None.
33 Boston Day School,	Boston, Mass.,	1869	Miss Sarah Fuller, Principal,	38	20	18	4				9 to 2.	Nine weeks during the year.	None.
34 West Virginia Inst.,	Romney, West Va.,	1870	Horace H. Hollister, M. A., Principal,	22	14	8	2	1	1	1	1 9 to 12 and 1½ to 4.	Fourth Thursday June to First Monday September.	None.
34 Institutions in the U. S.,				3784	2132	1652	222	134	87	94			
Halifax Institution,	Halifax, N. S.,	1857	J. Scott Hutton, M. A., Principal,	44	25	19	3	3			1 9 to 1 and 2 to 4.	Second Wednesday July to First Wednesday September.	Gardening.
Catholic Institution,	Montreal, Canada,		W. J. Palmer, Ph. D., Principal,										
Ontario Institution,	Belleville, Ont., Can.												
National Deaf-Mute Col.,	Washington, D. C.,	1864	Edward M. Gallaudet, Ph. D., LL. D.,	52	51	1	7	7			Recitation, Study Hours.	Last Wednesday June to Last Wednesday September.	None.

AMERICAN ANNALS
OF THE
DEAF AND DUMB.

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A PRACTICAL VIEW OF DEAF-MUTE
INSTRUCTION.

BY ISAAC LEWIS PEET, M. A., NEW YORK.

Since The *Annals* was re-established, in September, 1868, a number of articles have appeared from different pens, which, while lamenting alleged deficiencies in deaf-mutes, proposed to remedy them by a change in the order of presenting the difficulties of language, from that adopted in the course of instruction which was introduced by Dr. Peet, in the year 1844, and which has been adopted in the great majority of the institutions for the instruction of the deaf and dumb in this country.

Some of these writers advocate a radically different system; and others, what is practically no system at all, so much does it involve hap-hazard in its order and details. One writer, indeed, goes so far as to say the teachers of the present day are not to be compared, as to the results they obtain, with those of a former period, and inquires if it is not probably owing in great

measure to the fact that those to whom he awards this distinction had no "course of instruction."

Granting the assumption, the deduction is by no means established.

No man can really accomplish so much, who sets out and continues an experimentalist, as one, who, having certain principles, rules and plans of procedure established, sees with his mind's eye his perfected work accomplished, before he applies the first stroke to the purpose he has in view. What would be thought of a man, who, beginning to build a house, dug his cellar, procured his materials as he wanted them, hired one or more men as he could get them, erected his frame, divided up his rooms, made modifications as he went on, constructed additions to supply deficiencies, and finally presented, as the result of his efforts, a piece of patch-work, which indicated the ever-veering ideas that experience suggested to his mind? How different this from the conduct of the true architect, who, bearing in mind the purpose for which the structure is to be erected, anticipates in his plan every want, fixes in feet and inches the size of every apartment, decides upon the quantity and strength of material, and pictures an elevation covering the whole, which shall symbolically represent to the eye the idea which the building, in its composite parts, is to embody in the uses to which it is to be applied, added to which the cost of the whole is estimated beforehand, and the result in dollars and cents is settled in advance. Of him, as of the other, it cannot be said. "He began to build, but was not able to finish."

The assumption, however, can not be true. With so many earnest laborers in the field, the teachers who now occupy the places of those who have gone before, *must* accomplish more than *could* have been accomplished when the whole work was *terra incognita*.

In the infancy of any art or science, every man *must*, to a certain extent, learn as he proceeds, and, in

default of teachers to himself, must profit by many failures, and, after a life-time of only comparative success, content himself with leaving, as a legacy to his successors, principles which he has established, whereby they, though perhaps greatly his inferiors in talent, shall yet surpass him in what he actually accomplishes. The dwarf, standing on the shoulders of the giant, may grasp the fruit hanging above the reach of the great figure that supports him.

The author of the Baconian philosophy gave instruments into the hands of other men, for making discoveries of which he never dreamed.

The inventor of the steam-engine offered to the world crude and ill-working machinery, far different from that of which an eloquent essayist has said: "The trunk of an elephant, that can pick up a needle and rend an oak, is as nothing to it. It can engrave a seal and crush masses of obdurate metal, draw out without breaking a thread as fine as gossamer, and lift up a ship of war like a bauble in the air. It can embroider muslin, and forge anchors, cut steel into ribbons, and impel loaded vessels against the fury of the winds and waves."

The man who rescued woman from the bondage of the needle, contributed nothing but a little bit of steel, peculiarly perforated, to the wonderful piece of mechanism which, in this day, shows itself in the perfected sewing-machine.

Morse taught letters to the lightning, but how far inferior were the instruments he employed and the results he obtained, to those, which, in the hands of his humbler followers, have circled the world with the thought-flashing wire, have bridged oceans, and annihilated time and distance, as elements of the communication of intelligence between man and man.

Pioneers loom up grandly in the perspective of history, but in not a single particular could they compare

with multitudes, who occupy, unnoticed, the foreground of the present.

This is no less true of the science and art of deaf-mute instruction. The teacher of to-day may not have the genius of De l'Épée and Sicard, of Gallaudet and the bright men whom he associated with him; but he sends forth a greater proportion of deaf-mutes capable of ministering to their own wants and to the wants of others, possessing a sufficient knowledge of language to enable them to make themselves understood, and to derive pleasure and profit from reading, and with a culture that gives abundant resources to relieve the isolation which their peculiar calamity imposes upon them. He has, moreover, his own share of those instances of developed genius, of whom he can say, as Sicard may have said of Massieu and of Clerc, "These are my jewels." This comparative uniformity of result has been attained since the crystallization of the floating principles, discovered by different masters, into the harmonious whole, represented by the course of instruction to which reference has been made.

The question, as has been shown, is not between system and no system, neither is it whether a better work may not be produced by a revision of the old, or by building upon the foundation of the new philosophy of language, itself suggested, it is claimed, by some prominent teachers of deaf-mutes, through the analysis rendered necessary in order to reach the minds of this peculiar class of learners, and which has, at all events, been developed in some of our institutions in advance of the labors of *savants* in the outer and more conspicuous field of thought; but it is, whether the system is taught in the most efficient manner, and whether, in connection with it, the skillful teacher may not fully develop to his pupils the elements of language, and give them a thorough familiarity with its use. This question every one must put to himself, while carefully watching the labors of others; and, in this connection,

it may be said that no principal does his duty, who does not carefully supervise the work of his assistants, and, in cases where they are not pursuing a course calculated to insure success, instruct them in the method most desirable to adopt, and report them unhesitatingly for dismissal, if he cannot, by painstaking illustration, bring about a change of practice. He must not satisfy himself with periodical examinations into results, but he must see for himself that the machinery is properly worked, and that the daily routine of the classroom is exactly what it should be. No better plan can be devised than for the principal, when he does not fully approve of the practice of a given instructor, to take from his class a small number of pupils representing the average ability of the whole, and, after he has instructed them a week or two by what he considers the best method, to let the teacher compare their attainments with those which the rest of the class have made within the same period. In this way he will be likely to convince the teacher of the correctness of his views, and inspire faith in his leadership, rather than secure submission to what might otherwise be considered arbitrary authority. This work, of course, becomes less and less burdensome as the teacher, awakened by suggestion and experience, rises to a higher and higher plane of operation, often revealing to his quondam guide paths he should not be slow to follow, when leading others, to whom, in turn, he pays attention.

Owing to the peculiar condition of the deaf-mute, previous to the time when he is brought under subjection to the moulding hand of education, a condition which has not its parallel in any other work in which mind comes to bear on mind, teachers are not, when first recruited to the service, fully panoplied for the struggle. It is for this reason that great pains must be taken with them at the outset of their career, by those whose position as experts has led to their selection for the office of principal. And it is for this reason, too,

that they should be carefully watched and thoroughly assisted, till time has proved them fully capable of sustaining the heat and labor of the day.

The particular course of instruction to be pursued is of minor consequence, provided, as in Dr. Peet's first, second, and third parts, the fundamental principles, idioms, and most available words are all brought in, sooner or later, on a plan of regular progression.

The *method* by which such a work shall be taught is one of prime importance.

Instruction in language may be considered under the threefold aspect of the grammatical, the rhetorical and the logical. Grammar has to do with the forms and modifications of words; Rhetoric, with their signification, choice, and metaphorical use; Logic with generalization, limitation, assertion, and especially with sequence. Neither of these three views can be followed to the exclusion of the others. The natural tendency, however, with many teachers, is, to give prominence to grammar, and to drill on mere forms, without attaching so much importance to the circumstance, whether the written expression is the embodiment of a living idea in the mind of the pupil. Lessons well conned and perfectly recited, original sentences correctly giving a particular form of the verb, and translations, after a given model, of a number of sentences dictated by signs, satisfy his requirements, and the pupil is commended as a good scholar, who can most exactly perform the exercise thus prescribed, even if, when attempting to express thoughts in language to those not conversant with signs, he flounders in inextricable confusion. In the hands of such a mere creature of routine, no course of instruction is of any worth.

In a language whose words are subject to so few modifications as the English, Grammar is a mere incident, so easily taught that it is a disgrace to a teacher not to be able to familiarize his pupils with its few simple rules.

Rhetoric, in the sense just attached to it, is learned by the hearing child through use. The flow of thought in the current of speech, as it strikes his ear in different connections, gives significance to individual words, and the play of his own fancy gives rise to comparison and metaphor. With the deaf-mute, who has no language, the understanding of the exact meaning of words is a matter of growth, of gradual accretion. Signs hasten the acquisition, because they are so easily acquired as to cost him even less effort than speech does the hearing child, and can be applied directly to giving the signification of all words which are not the names of objects and qualities directly discoverable by the senses. As he is gradually introduced to reading, and taught to use the dictionary, he too learns the meaning of words from their connection, and the known introduces him to the unknown.

The real basis, however, of the English language as an object of study, is Logic. Taking this as his standpoint, and teaching words in their logical relations, the teacher has no difficulty with any of his lessons. According as he has this in view in the development and illustration of the book, will he succeed or fail. The deaf-mute from birth is unaccustomed to reason. His ideas are impressions, not deductions. He accepts his experiences, nothing more. Hence the necessity of developing his mind in such a way that he shall exercise it in the process of reasoning.

The first step in his education is evidently to appeal directly to his senses; and here it may be laid down as a general principle, that, in the early stages of his instruction, everything should be taught, as far as possible, in the presence of the object, and, failing this, in connection with its pictured representative.

Taking this as our guide, let us follow the path opened to us in the first of the three works already mentioned, and consider it by sections.

Section I., embracing ten lessons, gives us the names

of fifty objects, embracing all the letters of the alphabet. This is in accordance with the first experience of man in language. "And out of the ground the Lord God formed every beast of the field, and every fowl of the air, and brought them unto Adam to see what he would call them; and whatever Adam called every living creature, that was the name thereof." The objects, or their pictures, being in the room, the teacher should place before his pupils a card containing the corresponding printed names, and then, pointing to a name, he should take up the object and show it, making or not making, as he may elect, the sign for the same.

He should then point to the word again and require an intelligent pupil to bring him the object. Going on to the second word, he should repeat the same process and then review the two words whose general appearance has thus been made familiar to the pupils. After the correspondence between ten objects, and their names, has thus been established, the teacher should begin to teach the pupil to analyze the words by requiring the class to repeat after him with the manual alphabet each letter, as he points to it, of those composing the first word. The object should then be brought, as before.

The idea that each word is composed of letters being thus imparted, the teacher should print upon his slate, in alphabetical order, the different letters which have entered into the composition of the ten words, and should then drill his class upon them, till they can give the manual sign for the letter whenever pointed to, and in whatever order. The first ten words in the elementary book contain sixteen letters, namely: a, b, c, d, e, g, h, i, k, n, o, p, t, w, x, y; which can be taught thoroughly in an hour.

Each word should then be repeated with the manual alphabet, several times, by the class in concert. The teacher should then spend the remaining portion of the time in drilling his pupils on the words, taking

four pupils at a time, and requiring the first four taught to act as monitors to sub-divisions of the class while he is engaged with others. It is not too strong an assertion, to say, that, in this way, the ten words can be taught the very first day to a class of twenty intelligent pupils; for, what has been done can be done.

The next day he will take ten more words and review the first ten, and thus, by the end of five days, each pupil will be able to read, at sight, fifty words, embracing, in different combinations, all the letters of the alphabet, and to repeat these words whenever the objects they represent are shown to them.

It is now time to introduce them to writing. The script letters of the alphabet, both capital and small, should be taught, not in the order in which they occur in the words, but in the natural order of similar groups. The teacher should then require the pupils, standing at the slates, to write from printed letters on a card placed in front of them, the corresponding letters in script. This done, he should dictate the same letters with the manual alphabet, and require the pupils to write them. He should then set as copies all the words they have previously learned.

As soon as they have learned to write legibly ten words, they should have the book placed in their hands, and be required to copy the words from it, thus changing the print into script. The same words should be dictated by showing the objects or their pictures, requiring the pupil to write their names. The sign for each object might also be given, and the pupil required to write the word. This elementary instruction in writing will occupy about five days, and thus, in ten days, the pupils will have learned three forms of the English alphabet, and obtained the idea that all objects have names, of which they will have learned half a hundred.

Of course, instruction in writing should thereafter oc-

cupy a prominent place in each day's lessons, and careless habits of forming letters should invariably be corrected. The teacher should allow no listlessness in himself or his pupils. There should be such a tension in his own nerves as would exercise a magnetic influence upon those committed to his charge. Every movement of the class should be characterized by vigor, order, attention. Rising and sitting, standing and turning, should be exactly regulated from the first, and there should be an energy thrown into every exercise which of itself would teach the value of the moments as they fly.

The way of teaching just laid down is calculated to produce a variety which will keep the pupils interested, and the teacher will, if he be suited to the work, show in his face and manner, not the infinite patience usually ascribed to the self-sacrificing man who spends his time in irksome duties for the good of others, nor the sordid dullness which looks upon labor only as an equivalent for pay, but the pleasure and enthusiasm which characterize pastime, which make play of work, and which always distinguish, on every field, genius from mere talent.

A governing motive for the precise order given, is, that reading is naturally taught before writing, and for the young deaf-mute it is peculiarly difficult to make out the printed letters, if, as is the practice with some, writing is taught first.

Section II. introduces adjectives—those of color being selected for this purpose—fifty-seven new names of objects, and six contrasted nouns. The adjective is taught as part of a phrase. The word "book" is taken as the noun to be limited, and the pictures of seven books are introduced, alike in every particular except the single one of color; the phrases "a white book," "a black book," "a yellow book," etc., being printed underneath. Here, as before, the teacher presents the phrase first, and requires the pupil to show the object.

The words are fixed in the memory by repetition. Several objects of the same class, differing only in the quality of color, should then be introduced, and the class required to write the phrases designating the distinction. Here it would be well for the teacher, as a phrase is written, to place over each word therein its appropriate grammatical symbol, and afterward require his pupils to do the same. In this way they will learn that each of these words represents a different part of speech. With the practice previously acquired, the class should be able to go through the section, though it is laid down in eleven lessons, in about five days.

Sec. III. introduces adjectives of form and size, which are taught by contrast; "a long bench," "a short bench," etc. The method of teaching is the same as before. The seven lessons prescribed should occupy about five days, with an incidental review of all the words previously learned.

Sec. IV. introduces the singular and plural of nouns, both regular and irregular, and about thirty new nouns. It is divided into nine lessons which should not occupy over five days. The use of the article *an* before a vowel, which is here introduced, should be taught by putting the five vowels in a perpendicular line with a brace before them, the *an* written opposite the angle; thus:

$$\text{an } \left\{ \begin{array}{l} a \\ e \\ i \\ o \\ u. \end{array} \right.$$

The simple rule of adding *s* for the plural, can be easily taught by showing one object by itself, and then, several of the same kind by themselves; as, "a chair;" "chairs."

The irregular plurals are grouped, in the book, into those that form the plural in *es*, *ies*, *ves*, and then

are enumerated those which are exceptions to all rules. In teaching the plural in *es* the teacher should place the final letters of the singular in a perpendicular line in front of a brace, and within the concave, and then, at the apex, write *es*; thus:

ss	}	es.
z		
x		
ch		
sh		
o		

Words ending in *y* and forming their plural in *ies*, the teacher can illustrate by writing the singular on his slate, crossing out the *y* with his crayon, and writing *ies*.

So with substituting *ves* for *f*.

The less time spent on these exercises, consistent with accuracy, the better; as should be the case with all exercises which involve mere grammatical points. They should be hurried over with great rapidity as something easy to be acquired, as the horseman would canter over the plain with the toilsome hill in sight. The slightest mistake, however, in these simple things should never be permitted, and should even call for an assumed impatience of manner: real impatience, it is perhaps unnecessary to remark, being beneath the character of a true man, when dealing with such plastic material. With a good class, there is, in fact, no difficulty in going rapidly, when teaching such simple matters. The poor teacher, alone, makes mountains of such mole-hills.

Section V. treats of numbers as far as thirty. These are treated first as concretes in connection with objects of various denominations, and finally as abstracts, the objects, of course, being in the room. The verbs "bring," "lift," and "strike," in the imperative, are also introduced, and the teacher should spell with his fingers or write on his slate different directions. The interrogative "how many?" is also given, and here it would be well for the teacher, in the exercise of a discretion

he should use with all books, to take up lessons sixty-two and sixty-three, occurring in Section VIII, departing from the principle laid down by the author, of teaching only one thing at a time, and of postponing affirmation until he has given a clear idea of nouns considered as singular and plural and as limited by the adjective.

In these two lessons, the phrases "There is" and "There are," are introduced in sentences like the following: "There is a book," "There are two books." With these phrases in use, it will be easy for the teacher to present before the class groups of different objects either directly or pictorially, and ask such questions as the following:—

"How many chairs are there?"

"How many boxes are there?"

"How many flies are there?"

"How many knives are there?"

"How many oxen are there?"

"How many red ribbons are there?"

"How many long sticks are there?"

"How many short sticks are there?" etc., until he has introduced the plurals of all the nouns his pupils have learned, thus practically reviewing them. This full form of the question is better than the abbreviation, "How many chairs?" "How many boxes?" etc., on the ground that a deaf-mute should not be taught any form which he cannot properly use when the occasion arises; in other words, which is not good English.

The other points in this section are the adjective pronouns "some" and "many," the days of the week, the time of the day, etc., and also the first idea of generalization; *e. g.*, that a pen, a book, a hat, a key and a knife are five *things*. This lesson, numbered 47, and those on time, numbered 49 and 50, should be postponed until lesson 74 has been reached, inasmuch as at that time it will be easier for the teacher to form

correct questions and the pupil to give correct answers. This section can be perfectly taught in six days.

Sec. VI. introduces two or more adjectives before a noun, indicating the order in which they should come; for instance, that adjectives of color immediately precede the noun, other adjectives being antecedent, and numerals the first of all; that adjectives denoting length precede those that denote breadth and height, and adjectives denoting height, those that denote breadth. It also gives some additional adjectives, presenting, on the principle of contrast, qualities more abstract and more equivocal in signification than those which have preceded; for instance, good and bad, old and new, old and young, cross and kind. It would be difficult, though by no means impossible, to give the idea of all of them without the use of signs, which, by this time, the pupil must have learned out of the school-room, if he has not already learned them in it. In teaching a phrase having two adjectives before a noun, let us suppose we have a large red book and a small red book.

The teacher will take up one of the books and ask the pupils what it is. If they do not comprehend him, he will inquire whether it is a box, or a key, or a pen. They will then promptly make the sign for *book*. He will tell them to write the word, which they will readily do. He will then ask if it is a blue book, or a green book, and they will write *a red book*. He will then ask if it is a large red book, or a small red book, and they will write, after more or less help, *a large red book*. This analytic method of teaching the adjective, it is perhaps unnecessary to say, could be pursued with advantage, in the first lesson in which this part of speech is introduced. He should then place the proper symbols over the words in the phrase, and over the symbol of the adjective before the noun, write several adjectives of color, and over the symbol next preceding, several other adjectives, thus;*

*We regret that, from the want of suitable type to represent the symbols, we are

large	white
small	black
thick	red
thin	green

a.....book.

The section of which this lesson is a part, will require not more than four days. Here it would be well for the teacher to put on his slate the symbol for the noun, and write under it, in alphabetical order, all the nouns they have learned, repeating the same process with the adjective, and then requiring the pupils to make signs in concert for each word in the two lists, or to point to objects that will correspond to the noun or suggest the adjective. He should then have his pupils write similar lists without his help, giving them simply the letters of the alphabet for initials to aid them. If he wishes three nouns or three adjectives beginning with *a*, he will write *av*, etc., etc.

Sec. VII. brings in the present participle of the verb, the participial phrase being represented as the name of a picture; *e.g.*, a boy standing; a girl kneeling.

The phrases "There is" and "There are," previously taught, can now be applied, and the pupils may write, when the picture is shown them: "There is a boy standing," etc., etc. The imperatives of the verbs are given at the same time, and the teacher can give directions to one of the boys or girls by writing or dactylology, like the following. Pointing to one of the boys he says, *Run!* The boy runs, and the rest of the class write: "There is a boy running."

This section can be well taught in two lessons.

Sec. VIII. introduces the idea of direct affirmation and negation. This has been delayed till the pupil has been thirty-seven days under instruction, or reckoning the time actually spent by the teacher with the class

as five days in the week—seven weeks in the institution.

This, surely, is not a late period to which to postpone giving the pupil his first idea of the English sentence. He has learned to read printed words and to write legibly, knows, in the singular and plural, one hundred and fifty nouns, to which he can correctly apply, singly, or in pairs, or trios, forty-three adjectives, has become familiar with the imperative and participial forms of twenty-seven verbs, and can count in figures and words as far as thirty. With this vocabulary of two hundred and fifty words, acquired with comparatively little effort and ready to his hand, he begins the difficult exercise of uniting words in their logical connection. After this, the principle is everything, individual words costing little, if any, trouble. As far as this, the intelligent parent, by painstaking, could have taught the child at home without the intervention of signs, a fact which furnishes a strong presumption in favor of this being the natural and best order of initiating the deaf-mute into the study of the English language. Now, however, the teacher must, if he would proceed rapidly, avail himself of the assistance which signs give in interpreting the meaning of words.

From what has been said, it will naturally be inferred that much importance is not to be attached, at this early stage, to independent study on the part of the pupil. Still, it is important that he should have something to do in the hours other than those devoted to work and play, in which the teacher can not be with him. There is, probably, no simpler or more profitable way of giving him such occupation, than that of furnishing him with a hand-slate, and requiring him to copy from his book a portion sufficient, when his slate will admit of it, to cover all that has been taught him in the class-room, and, when the limits of the slate prove too circumscribed for this, assigning the text in successive instalments, till he has reached the furthest point to which the

teacher has taken him, whence he will return and proceed from the beginning.

Thus, without trouble to his master, he will have constant practice in reading and writing, and, which is of far more importance, will be thoroughly exercised in review.

Affirmation and negation are introduced in this section in connection with natural actions.

The first sentences given are, "That boy is jumping," "That boy is not jumping." The teacher should let one of the boys jump. He should then ask, by signs, what the boy is doing. If the pupils do not understand him, he will ask if he is walking, or sitting, or standing. They will then reply in signs, "He is jumping." The teacher will then write, "That boy is jumping," first giving the idea in natural signs and then making a sign for each word. Rubbing out what he has written, he should require the boy to repeat the action and tell the pupils to write what he is doing. Here it would be well to write at once, "What is that boy doing?", explaining the question in signs and writing the answer under it. After a few repetitions the pupils will be able, when the question is asked, to write the answer correctly. He should then write, "Is that boy jumping?", and write the answer below, "Yes, sir. That boy is jumping," teaching the meaning of the words as before. Pointing to another boy who is sitting, he will write, "Is that boy jumping?" The class will probably all shake their heads. He then answers the question by writing, "No, sir. That boy is not jumping."

After several such actions have been performed in their presence, involving, in their expression, different verbs, the class will be introduced to the plural in the same manner, similar questions being asked. It is surprising in how short a time the pupil will catch this idea, and use correctly all the verbs he has learned. It will be observed that the primary use of signs is not for the

purpose of dictation, but to lead the pupil to think for himself, and to think, as soon as possible, in words.

The next step is to teach the general or habitual form of the verb in the present, the difficulty consisting in giving the pupil the idea of the difference between what is now proceeding before his eyes and what is only *sometimes* or *often* done.

The teacher wishes the pupil to arrive, for instance, at the idea that a boy runs sometimes. He first writes, "Is that boy running?" The pupil, having become familiar with this form of question, will naturally write, "No, sir. That boy is not running."

The teacher will then ask in signs if he runs sometimes. All the class will naturally say "Yes." He will then write, "That boy runs sometimes," explaining the sentence by natural signs, and afterward making a sign for each word. He will then point to several boys who are sitting, and write, "Are those boys running?" They will naturally write, "No, sir. Those boys are not running." He will ask, as before, if those boys run sometimes, and the class may be taught to write, "Those boys run sometimes." After a few exercises of this kind, involving the use of different verbs, the questions, "Does that boy run sometimes?" and "Do those boys run sometimes?" can be taught and answered at once in writing.

Proceeding thus from the particular to the general, it is easy to give the idea that any boy, or a boy, runs sometimes, and that all boys, or boys, run sometimes. The negative form may properly here be introduced in connection with the word *often*, the sign for which as well as for *sometimes*, the pupil must have learned out of the school-room. The teacher asks in writing, "Does that boy dance often?", explaining the meaning of the word *often*, and when the pupils shake their heads, writes for them, "That boy does not dance often." By putting similar questions with other verbs, he will soon enable them to write correctly and intelligently in this form. He will then write, "Does that boy dance *sometimes*?"

and they will write, "Yes, that boy dances sometimes." It will not be long before the pupils will become familiar with these tenses in the affirmative, negative and interrogative, with both singular and plural nominatives.

The course, as laid down in the book, does not present these points in exactly this order, but experience having shown that the pupils remember these forms more perfectly, when thus presented to them, and are less liable, therefore, to make blunders in their use, and that they will arrive at the idea of the general more readily from this induction from the particular, the author of the course recommends it as a modification to the work, which should be made by all teachers in their practical use of it. It would be well, at this point, to let the pupils try to write little sentences for themselves. Let the teacher give the form in grammatical symbols, and some of the words, and let the pupils fill out the blanks, thus;* "A cat.....often;" "A cat.....fly."

The first of these forms, when filled out, would give such a sentence as the following: "A cat jumps often." The second, "A cat does not fly".

Sec. IX. teaches the affirmation and negation of quality, using the adjective as predicate, and *is* as copula. Additional adjectives are given, and some adverbs to qualify them, and the adjective pronouns *some*, *all* and *many*.

It also introduces the idea of predicating the genus of the species or of the individual.

The demonstratives, *this* and *these*, are now added to *that* and *those*, previously taught.

It is here important that the exact distinction between the demonstratives should be inculcated, and to do this, it is expedient to have a number of objects of the same kind, of which different qualities may be

*We are again compelled to omit the symbols, but give the examples without them.—ED. ANNALS.

predicated. Let each of the class hold in his hand, for instance, a red ribbon. The teacher will ask each one, by signs, what it is he holds in his hand. They will spell *ribbon*. He will then ask them if it is far off. They will say it is near. He then goes to the slate* of one of the pupils and writes, "This ribbon". He then asks if it is green or yellow or blue, and they will say it is *red*. He then writes, "*This ribbon is red*," explaining the sentence by signs. He repeats the question to several of the pupils, requiring them to spell the sentence with their fingers. Calling the attention of all the pupils, he repeats the question and requires them to write the answer in concert.

The next step is to have them throw the ribbons into a heap near them, and, repeating the same questions as before, with the addition of one to the effect whether there is one, or more than one, ribbon,—to teach them to write, "*These ribbons are red*." He then puts one red ribbon at a distance from the class, and ranging himself with them, points to the ribbon and asks if that ribbon is near them. They will say by signs, "No, it is far off." He will then spell with his fingers, "*That ribbon is red*." In the same manner, putting several red ribbons at a distance, he will teach them to write, "*Those ribbons are red*." On using green ribbons, he will probably find them able to write:—

"This ribbon is green."

"These ribbons are green."

"That ribbon is green."

"Those ribbons are green."

The negative form should now be introduced, the pupils writing, "This ribbon is not red. This ribbon is green." By multiplying examples, taking different nouns and different adjectives, the teacher will be able to review, in both numbers, all the nouns they have

*When the word *slate* is used in this article, reference is had to the large slate tables corresponding to black-boards in ordinary schools. In most institutions for the deaf and dumb, one of these is assigned to each pupil.

previously learned, and also all the adjectives, and thus fix in the mind, for all time, these peculiar forms of expression.

It would be well, as soon as possible, to put the questions he introduces for analysis, in language instead of signs; *e. g.*

"Is that pen long?"

"Are those pens long?"

"Is this pen long?"

"Are these pens long?"

To which the answers will be:

"No, sir. This pen is not long. It is short."

"No, sir. These pens are not long. They are short."

"No, sir. That pen is not long. It is short."

"No, sir. Those pens are not long. They are short."

The demonstrative pronouns, from the relative positions of teacher and pupil, being opposite in question and answer.

The teacher who prefers to defer the introduction of the pronoun till it occurs in the course, may repeat the nominative, thus; "This pen is not long. This pen is short;" but there is a little gain in bringing it in now; the idea being, that we desire to have our pupils write idiomatically so far as they go.

From the particular we advance to the general, and teach the pupil to make such assertions as, "Leaves are green," "Crows are black," "Guns are straight," etc.

In predicating the general of the particular, as given in lesson seventy-four in this section, the teacher will go back to lesson forty-seven, where names are grouped as *things*, *animals*, *persons*, and *objects*. Presenting these groups, he will ask, by signs, if a horse is a thing, and when the pupils reply, "No, an animal," he will teach them to write, "A horse is an animal."

In this connection it would be well to ask in writing or by dactylology, several series of questions, involving, in the answers, the various principles previously taught. Take the following as an illustration:

Qu. "What is this?"

Ans. "This is a book."

"Is this a red book?"

"No, sir. It is a green book."

"What is a book?"

"A book is a thing."

"Does a book run?"

"No, sir. It does not run."

"Do some animals run?"

"Yes, sir. Some animals run."

"Does a dog run?"

"Yes, sir. A dog runs."

"Does a fish run?"

"No, sir. A fish does not run."

"What does a fish do?"

"A fish swims."

"Do all animals run?"

"No, sir. All animals do not run."

"What is that animal?" (pointing to a fly.)

"It is a fly."

"Is that animal moving?"

"No, sir. It is standing."

Passing to numbers, such questions as the following may be asked: "How many things are a pen, a hat, a book, a key, a knife?"

Before going further, it would be well for the instructor to introduce the days of the week and hours of the day, and the words *yesterday*, *to-day*, *to-morrow*, teaching each pupil to write every day, on his slate when entering the class-room, such expressions as the following:—

Yesterday was Tuesday, August 23d, 1870.

To-day is Wednesday, August 24th, 1870.

To-morrow will be Thursday, August 25th, 1870.

He ought now to be taught to answer the question, "What time is it?", whenever his attention is called to a watch or a clock. The pupil has now been fifty days, or about ten weeks, under instruction.

Sec. X. introduces the transitive verb with the object following it, and gives a little vocabulary of this class of words. Here, as before, the particular should precede the general. The action should be performed in the presence of the class, and the pupils taught to express it in words. The teacher, addressing one of the pupils, says, "Strike that table," and, while he is doing it, himself writes, "That boy is striking the table." He then writes or spells the question, "What is that boy doing?" After numerous actions of this kind, which he will supplement by pictures of various actions, he brings in such general forms as, "A cat sometimes scratches a child;" "A colt follows an old horse." It is important to teach the negative in close connection with the affirmative, and have every sentence written in answer to a question.

Before going further, the verb *to have*, postponed by the author to Section XXIII, should be taught, on the ground that it is important in carrying on the simple conversations in which the pupil should now be constantly exercised. It will also be proper for the pupil to write sentences of his own, the teacher guiding him with grammatical symbols, and by inserting certain words, either in the nominative or objective.

It would be well, also, to dictate a few sentences by signs, as preparatory to the exercise, found very profitable by all who have tried it, of translating narratives from natural signs into language.

He should also write a number of related sentences on his slate and require his pupils to translate them into signs, an exercise corresponding to reading.

The conjunction *and* is now taught as uniting two simple sentences. Here the logical idea of sequence should be fully brought out.

After initiating the pupil into the idea, the teacher will take such a sentence as the following: "A boy lifts a gun and shoots a bird;" writing first the protasis and requiring the pupil to supply the

apodosis. Thus: "A boy lifts a gun and does what?" or, *vice versa*, "A boy does what, and shoots a bird?" He will easily give the idea by asking the pupils, by signs, if a boy lifts a gun and sweeps the floor, or takes a needle and shoots a bird?

Sec. XI. teaches the use of those nouns before which the indefinite article cannot be used, except by a grammatical ellipsis, such as *bread, salt, sugar, butter* and the like. Questions should be asked concerning all these objects, and the pupils required to answer them in writing.

Sec. XII. introduces nouns denoting both individual objects and quantity or bulk; as, "some paper;" "a paper;" "some glass;" "a glass;" to be taught on the principles already laid down.

Sec. XIII. brings in the preposition to fill out the intransitive verb, so that its meaning may be brought to bear upon an object; and

Sec. XIV. prepositions governing nouns, so as to form adjective or adverbial phrases. Here a brace should be put over the phrases, and the symbol of the adjective or the adverb placed above it; as in the following:*

"People look at a boy without arms." "That boy is carrying oranges in a basket."

The writer's views of the manner of teaching the adverbial phrases formed by the preposition and noun were given in the fifty-first annual report of the New York Institution, on pages 31 and 32.

The time has now come when the Chart of Predicates of the English Sentence, devised by the writer of this paper, may be profitably taken up, and the pupil taught the fourteen forms of the English sentence thereon portrayed: taught so thoroughly, taking up one form a day, in connection with other lessons, that he will never make a mistake in the general structure of his sentence. Though it is proposed to publish this

*The symbols are omitted for the reason already given.—ED. ANNALS

chart separately. it is here inserted, that teachers may have an idea of it.

CHART OF PREDICATES.*

1. I am.

A bird sings.

2. Sugar is sweet.

Sugar tastes sweet.

3. Mr. B. is a teacher.

Mr. B. continues a teacher.

4. An eagle looks at the sun.

4½. The sun is looked at by an eagle.

5. A child obeys its parents.

5½. Parents are obeyed by their child.

6. John gave James a book.

6½. A book was given James by John.

6¾. James was given a book by John.

7. The soldier made the king a prisoner.

7½. The king was made a prisoner by the soldier.

8. The sun makes us warm.

8½. We are made warm by the sun.

Thorough investigation has shown that every sentence, however complex, may be reduced to one of these fourteen forms: all the words, phrases and clauses modifying any one of the symbols in any given formula, being considered as adjective or adverbial, and as such, a part of it, and capable of being included with it under a brace. Its judicious use, it is believed, will greatly facilitate the comprehension of the meaning of a sentence on the part of the deaf-mute, and will greatly aid him in correct composition. On arriving at this point, it will be safe for the teacher, as a variation in the study of the course, to begin to dictate little stories and dialogues by dactylology: requiring the pupil to give a sign for each word as he spells it, and then calling on one of the pupils to convey the idea of the whole sentence in natural signs.

This done, the whole class will write the sentence. After a while, their memories will be sufficiently quicken-

* The symbols are again omitted.—ED. ANNALS.

ed to be able to retain three or four sentences before writing, and finally the whole story. In the New York Institution, we have used for this purpose, with much benefit, a little book called "Sargent's Second Reader, Part II.", in addition to original narratives prepared for or by the teachers. After a while, the pupil will be able to write stories from natural signs, and also little compositions describing pictures or giving his own ideas on different subjects, and little letters telling his friends of his experiences at school.

Sec. XV. to XXXVI. give a number of additional tenses of the verb in the active and passive, the infinitive, the personal pronoun, the peculiar use of the definite article, some of the auxiliary verbs, reading lessons, and a vocabulary embracing under an appropriate classification the fourteen hundred words which have entered into the composition of the work.

With a bright class, such as is formed of the best twenty of those who enter a large institution at the beginning of the term, a good teacher, following this system, can go through this book thoroughly in a year. He should not, however, dismiss the book in future years, but keep it in his pupil's hands, and review its principles in daily exercises.

So much space has been occupied in giving details as to the method of teaching the Elementary book, that it is impossible to do more than refer to the continuation of the course.

The Second and Third parts should be taken up in connection with each other; the reading lessons in Part III. to be given with a daily lesson from Part II.

Then should come the development of the verb in Part III. It will require from three to four years to teach these two books thoroughly, thus making the course to occupy from four to five years, during which additional lessons in arithmetic, geography and history may be profitably given.

After the Elementary book has been thoroughly learn-

ed. it would be well for the teacher to spend a small portion of each day in teaching the particles, *when, if, because, therefore, as*, and those relative and participial phrases which form parts of a process of reasoning. The importance of these for the purpose of ordinary conversation, and for the facilitation of thought and argument, cannot be over-estimated.

If no mystery is made of them, if they are taught by one who realizes the idea previously advanced, that grammar is a mere incident, the pupil will learn to use them idiomatically and familiarly in a comparatively short time. Suppose, for instance, the teacher should ask one of his pupils the question, "Did you see your father last vacation?" he would at once answer, "Yes, sir. I saw him last vacation." Suppose he should then ask, "Did you see him when you were at home?" and, if he did not understand the phraseology, should ask the same question in signs, would he not be very likely to answer, "Yes, sir. I saw my father when I was at home." He should then ask, "When did you see your father?", and teach him to answer, "I saw him when I was at home."

After various questions in these two forms have been put and answered, the pupil cannot fail to grasp the idea, and thenceforward possess it as a part of his mental furniture.

In teaching the hypothetical words *if* and *suppose* would he not avoid all practical difficulty, if he should begin by asking questions in this manner, arriving at the logical development of the thought without regard to the question whether the pupil understood the words it involves, inasmuch as these can be so easily and quickly interpreted by signs?

Take such questions as the following and consider how easily the manner of answering them may be taught:—

"If you were a bird, what would you do?"

"If you had a dollar, what would you do with it?"

"If you should go to the city, what would you do?"

"If you had been a good boy yesterday, would you have had permission to go off the premises?"

"If it had rained yesterday, would the ground be wet now?"

"If Gen. Grant had visited us yesterday, what would the principal have done?"

The inversion of clauses may be taught by inverting the question; thus: "What would you do if you were a bird?" It is by answering questions like these that hearing children learn such relations of speech, not by taking them up as grammatical problems.

In the same way, clauses beginning with *because* are taught by asking questions commencing with *why*; and from this the proper use of *as*, *therefore*, *so*, and the like, can be easily developed.

The relative clause and participial phrase are grammatically considered as adjectives qualifying a noun, and as such are covered with a brace over which the symbol of the adjective is placed, but, logically considered, they are only steps in a process of reasoning to which the attention of the pupil should be especially called.

Compare the following:

"A man punishes his children when they do wrong, because he loves them."

"A man, because he loves his children, punishes them when they do wrong."

"A man who loves his children, punishes them when they do wrong." Again:

"I went to see my friend, because I heard that he was in trouble."

"Because I heard that my friend was in trouble, I went to see him at once."

"Hearing that my friend was in trouble, I went to see him at once."

The more frequently the pupil is exercised in these processes of reasoning, the more intelligent will he be-

come, and the more perfectly will he realize the availability of the English language as an instrument of thought—a language so little hampered by the bondage of grammatical modification, and yet so capable of exact statement and rational deduction, that it presents fewer difficulties to the deaf-mute, than any other of equal refinement.

In view of this subject, the sign language, as an aid in the development of thought, appears in its true light. It is not an obstruction, as some have vainly imagined, nor a source of weakness, but, properly used, an engine of immense power. A means, not an end, it quickens the reasoning powers into life and activity, and, when its work has been accomplished, it sends the deaf-mute into the world, not a mere parrot repeating sentences with which memory has more to do than thought, but a man, disenthralled, relieved of his disability, and able to speak to men in the language in which they were born.

SCIENCE FOR THE DEAF AND DUMB.

BY F. D. CLARKE, NEW YORK.

In the forty-eighth annual report of the New York Institution for the Deaf and Dumb, the last written by Dr. Harvey P. Peet, that venerable man, who, for half a century, had labored to perfect deaf-mute education, said, while speaking of the examination of the High Class, "We cannot read the report of the great advances in all the branches of good education, including, in some cases, ancient and modern languages, made by members of this class, without a painful degree of solicitude for their future. The range of remunerative occupations, for which education is required, open to a well educated deaf-mute, is restricted, and those

situations for which they are best qualified, are beset with a crowd of hearing and speaking competitors. * *

I look forward to that good time so long hoped for, when we shall have the means of adding to our very restricted choice of trades, some of those more attractive to deaf-mutes of superior talents and mental cultivation; such as printing, drawing and wood-engraving, all of which we have tried in former years with encouraging results, though on a small scale."

Admitting, as all must, the advantages of a good education, including even the ancient and modern languages, yet, with the venerable "Emeritus," we must regret the narrow field of usefulness, which alone seems to be open before our graduates. They cannot all become teachers, for, if they did, we should soon have more teachers than pupils. Besides, we all know that not every man has the peculiar gift of imparting instruction; many, even of the best educated, are lacking in this respect, and therefore make but indifferent teachers. In fact, those who possess, in the highest degree, that power of concentration, which is so much needed for success in the pursuit of the higher studies, seem, by some strange law of compensation, to be peculiarly lacking in the ability to express themselves in the simple manner, which is so essential in speaking to persons unfamiliar with those studies, which they have mastered. As paid contributors to literature, few deaf-mutes could succeed, not only on account of their disadvantage as regards the use of language, but also on account of a natural diffidence, and from having to contend with better educated and more experienced men, in a market which is proverbially overstocked.

From the learned professions their infirmity necessarily excludes them; for how could a deaf-mute plead as a lawyer, unless he were provided with a judge, jury, bar, and clients, who understood the language of signs? As a doctor of medicine, he would not only have to look to his own class alone for patients, but

would also be entirely shut out from those great aids which the sense of hearing lends the enlightened practitioner. As a minister of the gospel, he could, of course, only address persons like himself deprived of hearing, or those few hearing persons who have acquired his language. The fine arts require, for even the most uncertain success, an artistic training which we can hope to impart to but few of this class. From many, too, even of the more purely manual-labor trades, his misfortune would compel him to turn away. Is this large class, then, of intelligent and intellectual persons, to be forced to choose from the limited range of trades, taught at most of our institutions? If so, the men of the present pre-eminently practical age,—an age, the spirit of which, we must confess, is a mad rush after results, and, especially, results which can be measured in dollars and cents,—will be apt to ask, Why educate them at all? What is the use of teaching algebra and the learned languages to a shoemaker, a book-binder, a carpenter, or a gardener? And I am afraid that the only answers we could make, would be neither satisfactory nor convincing.

Some of my readers may think that I am painting this picture in rather dark tints, but let them look back and remember the flush of indignation which must have been called up by the remarks of General Butler in the House of Representatives, last summer, in opposition to the appropriation asked for by the college at Washington, and perhaps they may believe I am not altogether wrong. Now, General Butler is a representative man, the mouth-piece of a class, I fear of a large and growing class, of our countrymen. Black, indeed, for our institutions, will be the prospect, should this class ever get control of our legislatures, and balance, with no favoring hand, the expense of our work against its results in money values.

Ask any teacher of the deaf and dumb, what is the ultimate object of deaf-mute education, and nine

out of ten will probably answer, it is to enable them to gain an honest livelihood, and to teach them the great truths of religion; and this seems, truly, to be an object worthy of all our exertions. But, do not the generality of deaf-mutes, who have been five years under instruction, have a clear comprehension of God, and of the saving power of our Lord? And most of them have also, in that time, learned enough of some useful trade, to enable them to maintain themselves by manual labor. If, then, a religious laboring-man is all that we can hope to make of the deaf-mute, where is the necessity of our High Classes, and of our college at Washington? But is there not a higher, or, rather, a more comprehensive object in view? Should we not strive to enable the deaf-mute to use all of those talents, with which God has gifted him? And where can we find a more fitting or more unbounded field, than in the study of the natural sciences, and the pursuit of those avocations which require sharp sight, delicate manipulation, and skill, combined with a partly scientific education?

A hundred years ago, there were, in the whole world, only four institutions for the education of deaf-mutes, and Science, still in her infancy, was pursued more as an interesting study, than for any practical advantage which she might yield. But, since then, there has sprung up a class of men, who have devoted themselves to patient inquiry; men of untiring energy, who have possessed that power of close and accurate investigation, which has been a distinguishing characteristic of the master-minds of all ages. We have been benefited by their wisdom, and now, instead of our being able to count the institutions for the deaf and dumb on the fingers of one hand, they are numbered by hundreds, and Science, from an infancy which promised but little practical good, has grown to such beauty and power, that there is scarcely a trade or an art, to which she has not lent a helping hand.

From being a pursuit known only to the curious *savant*, Science has grown to be the means by which hundreds of thousands win their daily bread, and has become an honorable and useful calling, whose necessity is recognized by all. Is there nothing in the way that these two have grown side by side, which suggests that one may help the other?

We may not be able to make of our pupil a Kepler, a Newton, or a Tyndall; though there is no reason, except want of proper education, why deaf-mutes might not think out the laws of the planets, analyze light, or determine the radiation of heat through aqueous vapor, and the relation of that to the climate of the earth. But, if they cannot look through our telescopes to discover new worlds in the heavens, or through our spectroscopes to find new constituents in the flame of a candle, they can direct our mines, engineer our railways, preside over our chemical works, assay our metals, reduce our ores, plan our bridges, take our photographs, make our microscopes, be our geologists, our botanists, our surveyors, our architects, and our engravers.

It is as possible, nay more possible, for them to be all these things, than to be soldiers, priests, painters, poets and editors; and yet deaf-mutes have filled all these positions with honor. Why, then, should we deny them access to a great field of useful labor, which is but just beginning to open? If we have no hope of lifting them to the ranks of glorious thinkers, is there any reason why we should not strive to place them in the files of skilful, enlightened labor?

Our former knowledge of Science has been like a river, at whose mouth we have now arrived. Behind us, the stream, though mighty and majestic, has been hemmed in by banks on either hand; before us, lies an ocean, vast and unlimited, and, though unexplored, only needing adventurous sailors, to lay at our feet its countless treasures. The Columbos and Balboas of Science are already on their way to search out its Mexicos

and Perus, and soon less daring adventurers will be following in their wake. If the deaf-mute cannot be the daring captain, who carries his flag into seas before unknown, surely he can do service as a pilot, and sail through channels which use has made familiar to him.

In a conversation, a short time ago, with the geologist of one of our larger States, he mentioned the difficulty of obtaining men of practical scientific education. "I can find employment," he said, "for five times as many properly educated men as I can procure, and the demand for them steadily increases." We have not yet arrived at perfection in any of our pursuits, and shall not for centuries to come. We commonly look upon our machines as creators of force, and venerate them accordingly; but, in reality, they are merely the means employed to prevent the almost total waste of the energy supplied by the simple operations of nature. In the steam-engine, for example, we wonder that so great a work should be accomplished by a means apparently so insignificant; and yet, in fact, the machine accomplishes nothing, except to apply a fraction of the energy, generated in the furnace, to the conversion of water into steam, and, when we consider the small part of this energy which is conveyed by the steam to the cylinder and there applied to practical purposes, we can well believe that we have not yet come to the end of invention. We can not flatter ourselves, as we are apt to do, that we have reached the highest stage of civilization, but we can easily believe that the field for enterprise, practical and scientific, instead of narrowing down, will grow wider and wider, as our powers of vision are strengthened to look over the vast expanse stretching out illimitably before us. Are we, the teachers of the deaf and dumb, to stand idly by and fold our arms, while we see our pupils ignorant even of the fact that such a harvest exists? Shall such talent as they possess, and often it is not little, die for want of judicious employment? I hope and believe not. With scarcely

an exception, all the sciences are as open to deaf-mutes as farming or cabinet-making.

A deaf-mute could not conveniently drive a locomotive at night; but there is no reason why he should not superintend the manufacture of the steel, used in the construction of the locomotive. He could not act as brakesman on a train; but he might invent an improvement on the brakes now in use. He could not attend the hoisting machinery of a mine; but he might plan and build that machinery, or, from a knowledge of geology, he might be able to point out the best spot to begin mining operations. Want of hearing, and that alone, shuts him out from the more menial employments, but there is no reason why he might not compete, and compete successfully, for the prizes held out, by the higher vocations, to intelligence and skill.

What has been done to fit deaf-mutes for this great field? The college at Washington has done, and is doing, good work. According to its report, one class, of three graduates, gave us a deaf-mute, who was thought worthy of a commission from the Coast Survey, to conduct microscopic examinations of importance to the public service. He has also secured a patent for an improved microscope, which has been well spoken of by men of science. The second, of this same class, has obtained an appointment as an examiner in the Patent Office, and is said to have passed, with great credit, the rigid competitive examination, to which all applicants were subjected. The third might have distinguished himself on the same field, but he saw fit to devote himself to teaching, and accepted an appointment as tutor in the college. That it was not the college course, alone, which did all this, is proved by the remarkable success which attended the instruction of Dr. Dudley Peet. While yet a student of medicine, and only able to teach a few evenings each week, his success was so marked as to call forth the highest praises from Professor John Torrey, who, in speaking of this class,

taught under difficulties which would have been considered wholly insurmountable by many, said. "The success that has followed Mr. Peet's instruction, would seem to warrant the construction of a laboratory, and the furnishing the same with a complete apparatus, that your pupils may possess every advantage of gaining a thorough knowledge of a science which has become indispensable to society." The hint here given was acted on, and as perfect a laboratory as the means at the command of the institution could afford, was purchased; Mr. Angus, a pupil in the former class was appointed to assist Dr. Peet, and prepared all the experiments with which the lectures were illustrated; and in the next report by Professor Torrey, two years later, we see the result: "This class showed a decided superiority over the one, examined by me two years ago, owing, as I think, rather to the experience acquired by the lecturer and his assistant, and to the increased facilities for imparting instruction in the science, than to any difference in the capacity of the pupils. * * * I think his pupils will compare favorably with the chemical classes in most of our colleges. Some of them showed great proficiency in the higher branches of the science. This is no small praise, and is deserved equally by the students and the teachers, for it is much more difficult to communicate and to receive knowledge by means of the sign language than by ordinary speech. It is much to be hoped that the directors of your institution will grant all the necessary means for instruction in chemistry, and *such other branches of science as are now associated with the daily affairs of life.*" Two of the pupils of Dr. Dudley Peet showed a proficiency which was remarkable, even in such a class. These were Messrs. Angus and Wells, and that they did not gain a position in some of the many occupations open to practical chemists, may be accounted for by the strong inducements which were held out to them to remain, as teachers, where they

could enjoy the society of people, who, like themselves, were familiar with signs. Both of them are, I believe, now engaged as teachers, and Mr. Angus, in particular, is said to be a thorough chemist, able to perform any of the various operations which are expected from such. Do not these facts show that deaf-mutes do have a taste for the sciences, and that they will be successful in them?

At present, I know of no other deaf-mutes than those I have named, who are engaged in what may be called scientific employment; but if these have succeeded, others may. As regards scientific education, the reports of the various institutions are either entirely silent, or go to show that in many the sciences are not taught, or at most are given only a secondary position; while in some of them much valuable time is spent in teaching logic, rhetoric, moral philosophy, the ancient languages, etc. There are many pupils in our higher classes, the children of poor parents, who, on leaving school, will have to support themselves. These cannot attend the college, on account of the expense*, and to them such studies are useless, except so far as they go to discipline the mind, to serve as mere accomplishments, and to lend brilliancy to our public exhibitions. Most of them might be given a thorough knowledge of the fundamental principles of optics, hydrostatics, astronomy, chemistry, mineralogy, metallurgy, or meteorology. Such an education, if intended for use and not for show, would enable them to obtain employments suited to their tastes, by which they would be able to support themselves, and reflect honor on their institutions. The men who control the manufactories, chemi-

* As this statement, as it stands, might convey a wrong impression, and even, possibly, have the effect to dissuade some worthy deaf-mute from going to college—an effect which we are sure the writer of the article would be far from wishing to produce—it may be proper to say that the provisions for the education and maintenance of students in the college at Washington are such that no one should be deterred from undertaking the course by the consideration of the expense. It may, indeed, involve some exertion and some sacrifices; but any one who is willing to make these, and who shows himself otherwise worthy of the advantages offered by the government, need have no fear that the necessary means will not be forth coming. — EDITOR ANNALS.

cal works, machine shops, and mining operations of our country; those who preside over the railway engineering, coast surveys, astronomical expeditions, and observatories of the nation; those who make our analyses and assays: any and all of them, would gladly take as assistants young deaf-mutes who have the proper preliminary education, and the ability and taste to acquire the special knowledge to fit them for those vocations.

It is useless to say that we are teaching these things. Some of the High Classes, it is true, do teach chemistry, but what one, except that in New York, has turned out a pupil who can make even the most simple analysis? They teach astronomy, but how many deaf-mutes can point out half the constellations, or record the transit of a star? They teach optics, but what pupil can focus a microscope, or measure the refracting power of a liquid? They teach geology, but none of their students are familiar with stones. And so it is: our pupils pass brilliant examinations, but when it comes to the practical use of their acquirements, they are found wanting.

What should we do? I, for one, do not feel competent to say; I hope only to call the attention of some older and more experienced teachers to my subject. If this attempt of mine turns the minds of any such in this direction, I shall feel amply rewarded. If none such step forward, I may, at some future time, give my idea of the manner of teaching these studies practically, but, at present, my notions of the *modus operandi* of teaching are rather too crude for publication. Were it not for the want of money, much could and would be done; for our profession is not wanting in those who have the intelligence and the will to remedy this evil, but, at every turn, we are met by the want of apparatus, and of the means to procure it. Still, it seems to me, that, if we were determined to do something in this direction, it might be accomplished. For instance, we might start with a few hundred dollars

invested in a photographic outfit, with which we could teach ten or a dozen pupils to be practical photographers, able, on leaving school, to enter at once on a lucrative business. A few more might, at a small expense, be taught the use of the microscope and spectroscope, and so practically, that they could use either to expose adulterations, or to follow any of the various occupations, which require, for success, an intimate knowledge of the use of these instruments.

Thence, we might pass to teaching astronomy, and the use of astronomical instruments, not in the superficial manner of the public schools, but so as to enable the graduate of our classes to enter the doors of an observatory, not as an errand-boy, but as a valuable, and valued assistant. As to teaching metallurgy, and perhaps mineralogy, I fear that most, if not all, of our institutions will have to postpone them to that "good time," which, from present appearance, seems so long in coming.

Other sciences present less difficulty; but as I hope, at some future period, to devote more time and study to this subject of the actual teaching of the sciences, I now reluctantly leave it.

There are several other avocations which seem peculiarly fitted to the deaf and dumb, and although, in many cases, they require no scientific education, they seem to merit a word. The first, and most important, of these, is printing; a vocation which is essentially one of silence, and, therefore, one in which the deaf would stand on an equal footing with the hearing. Indeed, as compositors, I think they might even excel hearing persons, for they are not so apt to have their attention called off, by conversation, or any noise which may happen near them. Moreover, this is a trade which would assist their education; a boy who spends two hours a day in setting type, must necessarily absorb some of the language which passes under his fingers; in fact, I have little doubt, that, merely as a

means of teaching the proper use of language, an outfit for a printing establishment, would amply repay any institution which should invest in one. And, when our pupils have become proficient in this art, they would command good, lucrative positions.—I have never yet known a good printer who could not obtain employment, and I have met many deaf-mutes who followed this trade, and who were as highly prized by their employers as any workman in their employment. Indeed, the only objection that I ever heard made against them, is, that, in setting up from badly written copy, their want of familiarity with the words of our language diminishes their usefulness, and renders them more liable to mistakes than hearing persons. It is but just to say that all I have met were graduates of the North Carolina Institution, that they learned their trade there, and were employed in Raleigh, some in the offices of the daily press, and others in the various job-printing establishments of that city. A printing-press, attached to any of our institutions, would be useful in many ways too obvious to mention. One of these would be as an aid in teaching wood-engraving, which, in my opinion, should be taught to all deaf-mutes who show a decided talent for drawing; and every teacher must have observed this, in many of them.

Book-keeping should also receive particular attention. It can easily be taught in any of our institutions, and doubtless is, in many of them; but our aim should be to enable deaf-mutes, not only to keep the books of a shoemaker, but those of a commission merchant, a banker, or, if need be, of the nation itself. Mechanical drawing, also, should be most carefully taught; the difficulty of teaching this art lies in the want of opportunity for practical education—that education which is taught in the machine-shop and learned over the anvil, or at the lathe. This I suppose we can not give them, but we can make skilful copyists of them; copyists who can take a draw-

ing, made by some other man, and increase or diminish its size according to order. Such draughtsmen as these can obtain work enough to keep them employed, and will be well paid for it.

But now I must approach a part of my subject, which I would gladly see some better known and more influential man take in hand. Supposing we have the deaf-mute thoroughly educated, and about to step into the arena of life. Under the present system, he has been taught shoemaking, or perhaps cabinet-making, and, in these trades, he can find employment for himself, for they are carried on at every corner; but if we have given him such an education as I have spoken of, we shall have to go farther. We must call to our aid the directors and life-members of our institutions, those men of weight and importance in the world of letters, of science, and of traffic, who have already opened their hearts to these afflicted brothers of ours; and, surely, they, who have done so much for the deaf, would yet again come to their assistance, and would not come in vain. Armed with letters from them, stating exactly what each deaf-mute can do, let some gentleman connected with each institution, make it his business to find positions for our graduates. Let him be earnest in his work, and push it forward by every means in his power. Let him call upon such as have, or may have, positions in their gift; let him advertise, and write letters, to ascertain where such situations are to be found, and, when he has succeeded in obtaining a few, let him call the attention of the press of our country to the fact that such work can be done by deaf-mutes, and get it to assist him in his undertaking. In short, let each institution, or, at least, each large institution, form bureaus of employment, modeled after the "teachers' bureaus" of New York and Boston. Let their object be to find what work is to be done, and to select those capable of doing it. Let them act with intelligence and will, and most assuredly a way will not long be wanting.

Such a system, at first, will cost money, but, as it grows older, the work to be done, and the expense of doing it, will both diminish. By the strictest and most scrupulous attention to truth, in stating exactly what our pupils can do, we shall soon attain a character for veracity, which will be invaluable to us. Let it once be known, that we furnish an article which is exactly what it is represented to be, and we shall soon be able to command all the positions our pupils are capable of filling. The difficulties in our way, at first, would be many and great, but they can be overcome by exertion, and surely the object aimed at is one to call forth the most strenuous and steady endeavor of which we are capable.

And will the men, who have devoted so much time, money and labor, to the glorious benevolence of raising a whole class from ignorance; the men, who have erected a monument more lasting than brass, hesitate to place on it this crown of glory? Will they fail to utilize the material they have prepared, and to open to our deaf-mute brothers lives of honor and of usefulness? Indeed, they will not! The men of America will respond to this call in behalf of her unfortunate children. The whole spirit of the age is one of progress, and that, too, of progress from theory to practice, from speculation to action. The century, which has girdled the world, carried ships over the desert, pushed the iron horse across a continent, freed the slave, and emancipated the serf, will yet lift the deaf to a position as near the equal of the hearing as he is capable of attaining. The men of the present generation will live to see their fellow-man, who in ages past was looked on as a brute, or but little better than a brute, welcomed to the ranks of enlightened toil, as an equal and a brother.

I call upon you, my fellow-teachers, to come forward, and lend a hand in carrying onward this work. The world has committed a great charge into our hands; let us acquit ourselves worthily of it.

THE DEDICATION OF THE MAIN CENTRAL BUILDING OF THE COLUMBIA INSTITUTION.

BY THE EDITOR.

An important event in the history of the Columbia Institution for the Deaf and Dumb, and, in view of the national character of this institution and the relations of its collegiate department to all the institutions of the country, we may say an important event in the history of deaf-mute instruction in America, was the official dedication of its main central building, by the President of the United States, to the purposes for which it was erected. The exercises were held Sunday afternoon, January 29, 1871, in the beautiful new hall of the institution; the adjoining lecture-room, which opens into the hall by large sliding doors, being used as a platform. The walls, columns and candelabra were decorated with vines and flowers, and portraits of Dr. Thomas H. Gallaudet and the Hon. Amos Kendall and busts of the Abbé de l'Epée and the Abbé Sicard were placed upon the walls. The President of the United States, the Committee of Arrangements, the gentlemen who were to take part in the exercises, and the officers, students and pupils of the institution occupied seats upon the platform, while the audience in the hall consisted of senators and representatives with their families, executive officers of the government and other invited guests.

The Hon. Jas. W. Patterson, senator from New Hampshire, who was chairman of the committee of arrangements, opened the exercises of the occasion with the following remarks:—

SENATOR PATTERSON'S REMARKS.

“MR. PRESIDENT, LADIES AND GENTLEMEN: It devolves upon me, as chairman of the committee of arrangements, to open these proceedings, and I give you all a most cordial welcome in the name of the

members of the two Houses of Congress, by whose charity, or rather statesmanship—I may say Christian statesmanship—this building has been erected. When our Saviour was on the earth we are told that on the Sabbath-day he went about doing good—healing the sick, opening the deaf ears, unsealing the blind eyes, and giving voice to the dumb. These and kindred institutions are simply the blossoming into fruits of the principles which our Saviour practiced when on earth. There is a singular and a beautiful propriety, therefore, in our being here on this Sabbath-day to dedicate this beautiful building to the great work of charity for which it is designed. And it seems to me that nothing can better illustrate the character of our civilization than an institution like this. Now, if we look at the past, if we look at the ruins of ancient civilization which have come down to us, we see temples dedicated to pleasure and to the gods whom the imagination of the ancients conceived. But the stranger who shall come here in the future to look upon the relics of the past will find not only beautiful buildings, but factories where the poor earn their daily bread, hospitals where the sick are cared for—the ruins of institutions like this, where the deaf and dumb are taught to speak and where the blind have their eyes opened.

“Why has the government of the United States founded this institution of a peculiar character, this *college* for the deaf and dumb? In each of our States we find some of the unfortunates who are educated in this institution, but not enough to justify the establishing a college in any particular State; yet we find enough scattered throughout the whole country to justify the establishment of such an institution at the capital of the nation. And the fact that they exist, that they are the unfortunate children of the Republic, makes it a Christian duty incumbent upon us to give them some place where their intellects may be developed, and where they may be brought into practical relations

with the great facts of life. The experience of this college, whose whole history is found within the six or eight years I have been in Congress, I think, demonstrates to us the utility of such an institution, as well as our duties as legislators and as a people. Those who have graduated from this institution are now employed in various useful ways—in our departments here; as teachers in this and other institutions; as correspondents for newspapers. Some of them, I understand, are becoming editors of newspapers, and thus giving their cultured thought and the knowledge they have acquired to the world. And if retirement from the battle of the world, if abstraction from cares, gives concentration of thought and a deeper and purer flow of sentiment, then these deaf people, whose ears God has stopped, may, with these opportunities, become better fitted, possibly, even than others for the education of the human race. They may give us even a deeper phase of abstract thought than those whose minds are distracted with the cares of life.

“With these words of introduction, I hand over the further conduct of these exercises to the custody of the President.”

Miss Caroline Makes, a pupil of the institution, then recited the Lord's Prayer in signs; Mr. William L. Hill, a student of the college, of the class of '72, recited, orally, the thirty-fifty chapter of Isaiah; and President Gallaudet delivered an address, which we are sorry our space does not allow us to give in full.

ADDRESS OF PRESIDENT GALLAUDET.

“MR. PRESIDENT, LADIES AND GENTLEMEN: A gift of the Government of the United States to its children of silence is now to be dedicated to the work of their education.

“In a series of acts, covering a period of thirteen years, Congress has provided, first, for the instruction of the deaf and dumb of the District of Columbia;

then for the teaching of those who have fathers in the military or naval service of the country; and, finally, for the collegiate training of the more intellectual deaf-mutes from the States and Territories. The point of beginning in the work of the institution is with minds not only ignorant of the simplest forms of knowledge to be gained from books, but lacking, at the same time, the power of receiving any impressions whatever through the ordinary channel of communication between man and man. The conclusion of its course finds the graduates grounded in the English, Latin, French, and German languages; in the higher mathematics; in the natural sciences; in mental and moral philosophy, and in political economy.

[President Gallaudet then gave a statement of the appropriations made from the national treasury for the benefit of the institution, since its foundation in 1857 amounting altogether to \$583,352.38. About three-fifths of this sum, or, in exact figures, \$345,767.87 has been expended in the purchase of grounds and the erection of buildings; the remainder has been disbursed for the support of the institution.]

“Within this time there have been under instruction two hundred and twenty-three pupils and students. Of these, 109 have been absolute beneficiaries of the United States, while for the support of the remaining 114, more or less assistance has been rendered by their friends or by the States from which they have come. One hundred and fifty-two pupils have been taught in our primary department; these, in almost every instance, coming to us in a condition of mental and moral midnight, the contemplation of which cannot fail to stir the sympathy of every soul not utterly given over to selfishness. And from the darkened minds of these eight score children has been lifted a cloud heavier than that of heathen ignorance. They have been led out of the shadow into the sun.

"From a condition of dependence and vacancy, wherein might come to them but a feeble understanding of the relations and duties of the high life that now is, and none whatever of the glories and joys of that which is to come, they have been raised to a state of self-reliance and action; their minds have been garnished with knowledge; their hands have been taught to labor for daily bread, and their hearts have been cheered with hopes of immortality.

"In the advanced department opened in 1864, and designated as the National Deaf-Mute College, seventy-one students have received instruction. They have come to us from every quarter of the land, recommended as youths of special promise, possessing mental qualities which fitted them for labor of a higher order than that which requires only the skilful hand. Nineteen of them, prevented from various causes from pursuing our course of study to its completion, have left us, after having enjoyed the advantages of the college for periods ranging from six months to three years, and are, so far as we have heard from them, sustaining themselves well in the business of life. Three young men of promise have been taken from us by death. Nine have graduated with such academic honors as their advancement justified, leaving forty still connected with the college.

[President Gallaudet here made a statement relative to the positions occupied and the salaries received by the nine graduates of the college, which was given, substantially, in the last number of the *Annals*.]

"The exhibition of these facts, though constituting a practical answer to the question just raised, (of the practical benefit of a collegiate course for the deaf and dumb,) does not give a full response to it. We have good reason to expect that our graduates will be able to render valuable service to society, not only as teachers and clerks, but as chemists, civil engineers, draughtsmen, architects, astronomical observers, translators of foreign

publications, editors, authors, librarians, lawyers, and in many other capacities which do not now suggest themselves, but which the perseverance and ingenuity of the deaf-mutes will doubtless discover. The statistics of deaf-muteness in our country lead us to expect that the number of students in our college will rise to 150 within the next decade. We may also look for an increase of our primary department to 100 within the same period, and these numbers are not likely thereafter to decrease. * * * * * * *

"We may then expect to send out each year as many as forty graduates from both departments of the institution. Did time allow, it would be easy to show that the actual gain to society, in the enhanced value of the services of these youth who are to be educated here, would far surpass the cost of sustaining the means of instruction which this institution affords.

"The work we are aiming to accomplish is an economical one. For every failure to develop dormant mental power, either in the individual or in the mass, is a loss to the state, absolute and irremediable; subtracting something, be it ever so little in the case of a single member of society, from the possible advance of the body politic in the grand march of civilization.

"In the progress of this institution mental powers of high order, in numbers not inconsiderable, have already been awakened from a sleep scarcely less heavy than that of death itself, to an activity the bounds and results of which no man can measure.

"And the work here inaugurated by Congress has but just begun. Until that day, the coming of which no man can predict, when the desert shall rejoice and blossom as the rose; when the ears of the deaf shall be unstopped, and the tongue of the dumb sing, it is reasonable to suppose that the college for deaf-mutes will have a mission to fulfill. And when the full measure of all the development of mind and heart which may be here effected

shall have been told by Him to whom all secrets are revealed, and set over against the sum of labor and treasure here expended, who will doubt as to the result of the comparison? As eternity is longer than time, as mind is stronger than matter, as thought is swifter than the wind, as genius is more potent than gold, so will the results of well-directed labors toward the development of man's higher faculties ever outweigh a thousand fold any estimate, in the currency of commerce, which man can put upon such efforts."

The next exercise was the recitation, in the sign language, by Miss Annie Szymanoskie, a graduate of the institution, of the poem entitled "Sacred Silence", published in the last number of the *Annals*, after which Mr. A. G. Draper, a student of the college, of the class of '72, delivered, in signs, an address, which was read at the same time, orally, by the Rev. Dr. Sunderland. We have space only for a part of it.

PART OF MR. DRAPER'S ADDRESS.

"May we not all fairly congratulate ourselves that America has learned so well the lesson of history, which points out a wise fostering of education as one of the surest safe-guards of a people; and rejoice that, whether mind or person or conscience is to be liberated, our country is ever vigilant

———to take

Occasion by the hand, and make

The bounds of freedom wider yet.

"In such a spirit, during a great civil war, when clamorous enemies threatened to besiege the very city in which it was assembled, Congress decreed the establishment of this college, and liberally endowed agricultural schools in every part of the country, relying for its justification upon the intelligence of the people and the after deeds of the youth to be educated.

"The history of no government reveals a brighter example of unshaken faith in itself and in its citizens. Ought it not to strengthen anew the confidence of all who maintain that

'government of the people, by the people, and for the people, shall not perish from the earth?'

"While, Mr. President, the deaf-mutes are deeply sensible of what the nation has done and is doing for them, they feel that society is to be no loser thereby. If one from their own ranks may properly speak for them, they ask the people not to overlook the gain, material and moral, which will accrue to the community through the education of themselves and those that are to follow them.

"A slight investigation will not fail to show that this work is consistent with the severest requirements of policy. And who can estimate the moral and esthetic gain? By what rule shall we calculate the value of the reactive influence exerted upon society through the constant rescue of a numerous class from the bondage of an incomplete mental development, and their transmutation into capable, cheerful, Christian men and women? Would that every one present might have seen the young men of the graduating classes as they came to college and as they left it; might compare the influence which they now exert, with that which they might be expected to exert if they had not received the training here given them. Then would few leave this hall without having formed an inward admission, that, though a man's ear be closed to all the concord of sweet sounds, yet may he hearken to the call of duty; though his tongue be speechless forever, yet may his actions breathe of an earnest purpose.

"As the deaf-mutes enter on the enjoyment of this beautiful structure, about to be received at your hand, Mr. President, they look forward hopefully to a time when throngs of alumni will revisit its well-remembered precincts, and gain new inspiration for duty from the thousand memories clustering around it; when the work done within it shall be so well known that every citizen, as his eye roams over its traceries, may feel that the United States has done well in enabling its deaf-mutes to labor more effectively among their fellow-men; to bear a more equal part in the never-ending struggle

Against the wrong that needs resistance,
For the right that needs assistance,
For the future in the distance
And the good that all can do."

The Hon. Geo. F. Edmunds, Senator from Vermont, then delivered the following address:—

ADDRESS OF SENATOR EDMUNDS.

"MR. PRESIDENT, LADIES AND GENTLEMEN: I am glad of the opportunity of saying for myself, and, I think I may safely say, for my brother senators also, a few words of appreciation of the excellency of the work the president of this institution has performed, and of expressing the pleasure we all feel, that the beneficence of the Government has not only been so well bestowed, but its design so well executed.

"We have met to-day to plant another great white milestone in the course of that empire of industry, of charity, of religion, which, we are taught to believe and do believe, is to grow more and more over the earth. And, in doing this, the relation of the state to the progress of civilization, in works of this character, should be clearly borne in mind. They who have read history from its glimmering and feeble dawn to the present time, can not have failed to see that wherever Christianity, education, charity, and virtue have been cultivated, there society has made its greatest progress. And in just the same degree that opposite influences have been suffered to grow and to govern, in that same degree everything that marks advance in the cause of humanity has waned, and, indeed, gone backward. And so it is that the highest duty of the state should be to treat as its greatest and truest ally, as its chief agent in its great duty of government, the benign institutions of which this one is a bright example. In every land where the school-house, the church, the asylum, and other kindred agencies of progress exist, and are the most numerous—where their influences predominate—there is the least of human distress, the least of crime, and the greatest sum of happiness in the body of

the community at large. And our people, therefore, perhaps more than any other, should cheerfully bear, as the people of this great republic do cheerfully bear, the slight burdens of taxation which they impose upon themselves to these ends, as in every lawful and proper way they help forward, through these influences and these agencies, the great progress of civilization, and make good the outlay a thousand fold.

"These affairs, then, are among the most material of the business of the state. They belong essentially to the theory and practice of a government whose chief end is the greatest good of its people.

"And so it is indeed fitting that you, Sir, the head of the state, the chief magistrate of the republic, the chosen representative of the whole body of that people whose arena of development embraces a continent, should be the official patron of this institution, and that you should, in the name and for the sake of their common brotherhood, dedicate this building to the fair and holy uses for which it was designed. Long may it stand to illustrate the wise beneficence that founded it, and to bless its associated students. And as industry, education, charity, virtue, and religion are the great and only means of human advancement and human happiness, let us hope that more and more edifices devoted to these and kindred uses may arise in all our country, and spread from land to land over all the globe, until the morning sunshine in its constant course around the world shall everywhere gild with a fresher glory the roofs of industry and of learning, and the spires and domes of Christian churches, and in the morning that is always somewhere 'above the awakening continents from shore to shore', the earliest song of birds shall evermore mingle with the chime of holy bells.

"To you, my young friends, the pupils and students of this institution, for whose benefit, primarily, this beautiful structure has been erected—although ultimately and chiefly for the benefit of your country which has provided it for you—I wish to say, that fidelity to the duties you

have to perform here, must, and I trust, will, be the proof of your deserving the advantages she here bestows upon you, and that as you sincerely labor, although in silence and seclusion, in the fields of activity the loving Father of us all has chosen for you, you will always find that your 'ways are ways of pleasantness', and all your 'paths are peace'".

The next speaker was the Hon. James A. Garfield, Representative from Ohio.

GENERAL GARFIELD'S ADDRESS.

"While one of the young men named on the programme was sending us a message out of his world of silence, by the aid of a translator, I was thinking what I should say. There were two thoughts in his remarks that struck me as very significant. I will add another, and speak of the three in connection.

"During the period of our great war for the Union, outside of the field of battle, three things were done that struck me as most remarkable. One was, that the representatives of the American people, and in the name of that people, had such faith in the future of their country, that they devoted the largest sum of money, and the greatest extent of the public domain ever given for any one civil object, to build a great highway from the Atlantic to the Pacific coast, and thus bind together, by a material bond, the most distant shores of the Republic. This act, done at such a time, was sublime.

"The second was, that, while the roar of hostile artillery was echoing within the Executive mansion, and through the halls of Congress, the representatives of the people, as day by day they ascended the steps of the capitol, saw those beautiful marble columns rising up one by one to perfect the national temple itself. This brave nation, having faith in itself, said, We will build on without fear of dissolution; we will show both friends and enemies that we are here and mean to stay. That beautiful symbol of national faith and hope deeply impressed me and gave me more faith.

"But when, about the same time, I saw the Congress of the United States take almost an empire from the public domain

and devote it to the work of education, building up in every state of the Union agricultural colleges for the better culture of our laboring people; and then, turning to this spot, where these silent children were making what many regarded as a foolish experiment, when the same Congress took half a million of dollars from the public treasury and devoted it to this work, I hailed it as a nobler expression of the faith and virtue of the American people, and of the statesmanship of their representatives, than I had ever before witnessed. And I believe it was. Several of the gentlemen have spoken of this movement as a work of charity. In my judgment, it is a work of very enlightened selfishness on the part of Congress. Mr. President, to you is confided the honor of presiding over the thirty-eight millions of men and women, who compose the body of this great republic. The source of all its greatness lies behind the material evidences of its prosperity—lies in the heads and hearts, the brain, the muscle, and the will, of the people over whom you preside. Anything, therefore, that affects their welfare, their force, their efficiency, touches the very essence of the national life. It is well known that only that portion of the population which is between the ages of eighteen and sixty, is self-supporting. Of these thirty-eight millions, eighteen millions are outside those limits. In other words, eighteen millions of the population over whom you preside, must be supported by the other twenty millions. From these twenty millions must be subtracted the infirm, and all those that for any reason are unable to support themselves. Now the students of this institution represent more than 20,000 of the population of the United States, most of whom, by the influence of institutions like this, have been lifted up from the lowest plane of intellectual life, to the dignity and value of intelligent citizens. Until recently, deaf-mutes were not regarded as morally responsible. If they committed murder, the law did not hold them responsible. They could not commit a crime. But by the beneficence and wisdom of our people, they have been lifted up to be not only responsible citizens, but they have become valuable members of society. One of the best things

connected with their education, is, that they have a lively sense of gratitude to the government for what it has done for them. These young men cannot fail to become good citizens. They cannot fail to be true to their country when they remember what they owe to it. I say, therefore, it is enlightened selfishness, rather than charity, to take this class of our fellow-men, and make them capable of doing a great work for the country. I am happy to send this message to them to-day into their silence. When I heard one of these young men recite that beautiful chapter from the ancient prophet, and when I remembered that he spoke those words mechanically—that not one sound of them was ringing in his own ears, though their lofty and inspiring meaning filled his soul—I looked upon it as one of the brightest and noblest triumphs of this institution. The House of Representatives has been proverbial for its economy in regard to expenses of this kind, but I am happy to say that, from the beginning of this work, the House has stood up nobly and generously to the support of this institution. And what these students have to-day contributed, and what they are sure to do in the future, will be a most complete vindication of the wisdom of the House, the Senate, and the Executive, united in this great work.”

Ex-Governor Jewell, of Connecticut, then delivered a short address, speaking as the representative of the city and state which was the first in this country to make provision for the education of the deaf and dumb; after which

THE PRESIDENT OF THE UNITED STATES
rose and said:—

“LADIES AND GENTLEMEN: I hereby pronounce to be complete the dedication of this institution to the humane purposes to which it has been assigned, by the various acts of Congress making appropriations for its erection and support.”

The exercises were closed with prayer and benediction by the Rev. Thos. Gallaudet, D. D., of New York.

THE LATE REV. COLLINS STONE.

BY SAMUEL PORTER, M. A., WASHINGTON, D. C.

[We prepared for the last number of the *Annals* a notice of the death of Mr. Stone, which contained a brief sketch of his life and gave some expression to the feeling of grief caused by his death. The manuscript of this notice was lost in the mail on its way to the printer; a fact of which we did not become aware, until it was too late to supply its place. We mention this, because it must have seemed strange to our readers, that, in a periodical devoted to the interests of the profession of which Mr. Stone was so distinguished a member, no mention was made of his death. What we wrote, if it had been published, would not have taken the place of the following fitting tribute to his memory from the pen of Professor Porter, who was formerly intimately associated with him, while, on the other hand, this sketch is so full and faithful as to render it unnecessary, now, for us to add anything.—ED. *ANNALS*.]

On the 24th of December last, the community were shocked by the announcement in the morning papers all over the land, of the death, by a surprising and fearful accident, on the afternoon of the previous day, of the Rev. Collins Stone, Principal of the American Asylum for the Education of the Deaf and Dumb at Hartford.

The particulars of this event are already well-known to most of the readers of the *Annals*. It was in accordance with his habit of hospitable attention to strangers, which was to him always a pleasure, that Mr. Stone had driven out, having in his company the Rev. Mr. Strong, of Faribault, Minn., in order to afford to that gentleman a view of the city and the suburbs. It was so ordered, by a singular concurrence of circumstances, that, contrary to his previous intention, the horse

he had in hand was not the one he usually drove: and it was to a habit which this horse had of prancing as a prelude to going forward, when started after standing or stopping, that the disastrous event is to be attributed. On the way homewards, in Sigourney street, as they neared the crossing of the railroad, the express train from the South came in sight around the curve not far distant. Being in a covered vehicle, Mr. Stone reined up the horse and leaned forward for a sight of the train. It would appear that he decided to go on. But, in starting, time was lost from the peculiar habit of the horse, and, the view being cut off by the carriage-top, the increased danger could not have been fully apprehended. One second more of time, or even a half-second, would have carried them clear. As it was, the carriage was struck, while the horse escaped unharmed. The two men were borne onward, along with the wreck of the vehicle, for some distance, by the *pilot*, or track-clearer, of the engine. The death of Mr. Stone was almost instantaneous, from a violent blow on the head. Mr. Strong escaped with severe bruises and one or two fractures, and now, as we write these lines, is happily convalescing, and, strange as it may seem, though really not unusual in similar cases, with no recollection of the circumstances connected with the accident. As for Mr. Stone, it seemed good to his Heavenly Father, here and thus to bring his earthly life to a close, and to take him home to himself. The manner of his death, though distressing to surviving friends, was without pain to him. And as was remarked by the Rev. Mr. Gould—in the funeral address—though death came to him unexpected, it found him not unprepared. There was the minor alleviation, for such a death, that the mortal remains were not so disfigured as to mar the natural appearance of the face and form as laid ready for the tomb.

The news of this event shot a thrill of astonished grief through many hearts in widely distant parts of

our land. He who was thus struck down was known, not only as the honored head of the oldest institution for deaf-mutes in America, and as having formerly held a similar position in the one in Ohio, which now stands second in number of inmates, but at the time of his death he was the oldest member of the profession then in actual service in this country, reckoning age by number of years occupied in the work. He was thus well-known to a large circle of acquaintances, and had been brought into intimate relations with many by whom his death would be sincerely and tenderly lamented. The readers of the *Annals* will miss his name as one of the Executive Committee in charge of the work, and they lose in him a zealous and efficient promoter of the interests of the publication.

Though a mournful, it is not an unwilling office which we undertake,—except for the diffidence we feel of our ability to perform it aright,—that of endeavoring to fix in the memory of ourselves and others as distinct an image as we may of our departed friend; of what he was in character and of what he accomplished in his life; to record his example as one worthy to be honored, and imitated; and to find what lessons it may furnish which we do well to lay to heart.

Collins Stone was born in Guilford, Conn., September 7th, 1812; studied in preparation for college under Rev. Aaron Dutton, of Guilford; graduated at Yale College in 1832; and, after teaching school a few months in Orange, Conn., began his life-work as an educator of deaf-mutes in 1833, in the American Asylum; was advanced to the office of Principal of the Ohio Institution in 1852; which place he resigned for the like position in the American Asylum in 1863. He was married to Miss Ellen Jane Gill in 1839, who survives him, together with two sons and three daughters. The eldest of the sons has been already appointed to succeed his father as principal at Hartford; and

one of the daughters is the wife of Mr. Williams, an instructor in that institution.

The following sketch of the parentage and early life of Mr. Stone was furnished at our request by his kinsman, Rev. Rollin S. Stone, who was also his class-mate and his room-mate in college.

"He was a descendant, in the sixth generation, from Rev. Samuel Stone, a Puritan divine of Hertford, Hertfordshire, England, in the reign of Queen Elizabeth. Six sons of that remotest known ancestor, the oldest and the youngest of whom were ministers, came to New England and settled in Massachusetts and Connecticut. Samuel, the youngest, was the first pastor of the First Church in Hartford, Conn.; which place was so named, as some suppose, in honor of his old English home. John, the fifth son, from whom the subject of our notice descended, came to Guilford, Conn., among its first settlers, and helped to build there that stronghold of their defence against the Indians which remains to this day, and is known as the Old Stone House. Built of solid material, and for the public safety, it stands a very modest memorial of the plain, substantial character of its builders, and of the enduring foundations of society which they laid for their posterity. His grandson was Timothy Stone, a colonel in the State militia, a representative in the State legislature, a judge of the county-court, and a deacon in the church. He was described by a fellow-citizen as 'eloquent, talented, dignified, and holding the highest influence in his native town.'

"The late Collins Stone was a great-grandson of that Col. Timothy Stone. He was the second son and the fourth of seven children of Deacon Timothy Stone, of Guilford, who had married Miss Eunice Parmelee of Durham, Conn., and who removed to that place when this son was about two years of age. The father was a farmer, of limited means, but of more than usual culture;

a music teacher and composer, and even a poet of no mean ability: an officer and pillar in the church, and always the pastor's right-hand man. And the mother was a woman of kindred spirit, a true help-meet for such a man; as public-spirited, as eager for knowledge, of high-toned political and religious principle, and one who in very many things exemplified Solomon's portraiture of the virtuous woman.

"When about three years old, he had a long and dangerous illness, from which recovery seemed almost hopeless, and which left its traces long afterward in a weakness of constitution. But it was then that his life's work and destiny were probably decided. For, then, with such earnest longings and oft-repeated prayers as only Christian parents know, was that sick and possibly dying child solemnly consecrated to God and to the ministry of His Word.

"Not many years after, the father died, leaving the widowed mother, with the farm and six young children on her hands. But her heart was strong in faith, and she accepted the early consecration of her son as a sacred charge, which required her to go forward in the face of all discouragements and educate him for the ministry. With almost incredible toils and sacrifices, she was enabled to carry him safely and successfully through his long course of study to his graduation at Yale College in 1832.

"Strictly moral and sober-minded from his childhood up, and through all the temptations of college life; standing firmly at his post in the "conic sections rebellion" which carried off half of his large class in their Sophomore year; and respectably faithful to his studies; he as yet evinced neither taste nor fitness for the clerical profession; nor indeed did he do justice to his really superior powers of mind. Not until his Junior year, in the great revival of 1831, which prevailed extensively in the land, did the prayers and sacrifices of his parents begin to reap their reward. Long years had they waited in the patience

of hope; long years had he wasted, of the unappreciated wealth of his advantages; till at length the scales fell from his eyes; and the new vision led at once to an entire change in his manner and purpose of life. Burning his cards, and abandoning the books of fiction and light reading which had diverted his mind too long, he began by hard study to redeem lost time and to fit himself for an honorable and useful career.

“He early accepted the ministry of the gospel as his calling, as the one dear choice of parental love, though perhaps with some painful doubts as to his success, owing to weakness of voice. But it was with the ministry in view that, on leaving college, he taught school a winter in Orange, Conn., that he might obtain means to enable him to pursue a course of theological study. With the ministry still in view, he went thence to Hartford, not intending deaf-mute instruction as his work for life. But, contrary to his previous expectations, he became deeply interested in the deaf-mutes. And he soon developed qualities that especially fitted him for the work and ensured to him permanent success therein. In that position he might hope ere long to re-imburse the expense of his education and relieve the family of the load they had borne for his sake; while in the ministry he could not reasonably hope for any such thing. And, more than all, he found, in the instruction of the deaf and dumb, a real and most earnestly practical ministry of a living gospel, to a large and needy class of immortal minds, groping in darkness. With the advice of venerable fathers in the ministry who were warm family friends, he at length decided to remain in the vocation to which Providence had called him. To this, indeed, he subsequently added a private course of theological study under Dr. Hawes, his pastor, and being duly licensed to preach, he occasionally officiated acceptably in the pulpits of Hartford and elsewhere. But, in after years, he made full proof of his ministry and of his early consecration thereto, by his

stated Sabbath ministrations in the chapel of the institution, where all the best qualities of his heart and mind found full employ. And his life, as a whole, from his conversion in 1831, for nearly forty years, up to that fearful consummation, as of the chariot and horses of fire bearing him out of sight, was the path of the just which shineth more and more unto the perfect day."

Tracing the career of Mr. Stone from his entrance upon active life,—we find him, first, conducting with marked efficiency and success the school which he taught for a few months after his college graduation. Then, as an instructor of the deaf and dumb, he was eminently successful in both the intellectual and the moral training of his pupils, and in gaining their respect and affection. As principal, in Ohio, he at once raised that institution to a higher footing of efficiency and prosperity. He did the best that could be done with accommodations which became too strait for the numbers demanding admission. Under his direction the plans were matured for the noble structure which has finally been erected; and that this consummation was not attained during his administration was through no fault on his part. The burden he had there to carry was, under the circumstances, a heavy one, but he bore it manfully and to successful issues. Soon after the Hartford institution came under his charge as principal, the circumstances connected with the effort to set up schools for deaf-mutes in Massachusetts were such, for a long time, as to render his position a peculiarly trying and difficult one, and to call for the most wise and energetic management. Through these difficulties he was able to steer safely and happily; while, by his thoroughness in the internal administration, he carried forward the institution with an ever advancing step.

During all these years, we find him active and useful, in various ways, outside of the sphere of professional duty:—first, as teacher and as superintendent of the Sunday-School connected with the Center Church in

Hartford; then, in Ohio, as an active member of the church, and as one upon whom the pastor especially leaned; and finally, again in Hartford, as a deacon of the church and an active promoter of its interests. At all times and everywhere, his heart and his hand were ready and efficient in every good work for which a demand could properly be made upon him.

The career of our friend was thus in the highest and best sense an eminently successful one. If we look for the secret of this success, we shall not find it in any pre-eminent natural endowments. He was not favored by nature with commanding power or attractive grace of bodily presence or of oral utterance. His powers of mind were not such as to qualify him to distinguish himself by any thing original, profound, or brilliant. His intellect was marked mainly by plain, strong, practical sense; to which were added great power of concentration, great strength of will, and a temperament favorable to quickness of perception and promptness and alacrity in action,—making a combination highly favorable to executive efficiency; and the eagerness which ever impelled him forward was well balanced by an instinct of cautiousness which made him both prudent and vigilant. He had also, as a natural trait, that benevolent interest in others, and especially in the young and the dependent, which is essential to success as an educator.

So far, nature had indeed fitted him for the work which he had to do. Yet, on the other hand, there were deficiencies, which were difficulties in the way, and in spite of which he succeeded as he did. In part or wholly as the effect, we presume, of the illness which went so hard with him in infancy, there was a want of pliability in the fingers, and of ease and grace in bodily movement; and there was not much of that mobility of feature and power of facial expression, or much of that histrionic talent, which are requisite for the use of the sign language with the fullest effect. There was

however, a wiry energy, and a spring and vivacity of movement, which in part made up for such defects. Yet, on the whole, we have, in his case, an instance which shows how small account should be made of mere physical adaptations, in choosing a teacher for the deaf and dumb, as compared with intellectual and moral qualifications:—however desirable in themselves, they dwindle almost to insignificance in the comparison.*

For the secret of the successful life we are reviewing, we must look deeper than merely to any combination of natural qualities. It is to be found only in that entire, conscientious and earnest devotion to duty, which was the ruling principle of action with our departed friend. It was thus that the five talents entrusted to him were made other five, and thus he attained to the reward of the good and faithful servant. Accepting the work which Providence had assigned him, his main aim and endeavor was to do this work thoroughly and well, doing it, however, not perfunctorily, but as a work in which his heart and soul were engaged. He had no by-ends or selfish aims to divert him from this work, and no ambitious strivings for anything above it. His care for his personal interests and those of his family never exceeded what duty itself would require. Here, indeed, as everywhere, his thoroughness and fidelity appeared; but, with him, private and domestic interests ever filled a place subordinate to the requirements of professional and public duty. Though exact and economical in pecuniary matters, he showed no solicitude about gaining or accumulating property. It is true, indeed, that this devotion to duty was for him the sure road to advancement in his personal interests; but if an eye to these had been his ruling motive of action, such motive would surely have manifested itself in other ways than in simple fidelity to duty. No doubt, also, he felt a satis-

*Mr. Stone was in stature below the medium height; rather stout in build; with a slight stoop of the shoulders, more observable in his earlier than his later years. His hair was originally red, but became white with advancing years.

faction in the approval of those whose good opinion he valued; but he was not of those who love the praise of men more than the praise of God;—the main-spring of his conduct ever appeared to be a conscientious and God-fearing devotion to duty. And in this way it was, we repeat, that he turned to so good account the abilities with which his Creator had endowed him.

This devotion to duty had in him its deep foundation in religion,—in a spirit of self-consecration to his Maker and Redeemer, in a faith which gave to spiritual realities their due predominance, and in humble and earnest prayer for divine aid and guidance. His boyish life, though unstained by immorality and baseness, would appear to have had no aim beyond the enjoyment of the passing hour. It could not have been free from reprovings of conscience at the time, as the neglected opportunities were afterward the subject of freely expressed regret. But when the change came, it was thorough and radical. His religion, though quite unostentatious, was genuinely honest and sincere. It took its character from the sound practical sense, the innate modesty, and the active working habits of the man. It was equally and wholly free from affected sanctimoniousness, from shallow unmeaning cant, from cold formality, from indolent sentimentalism, or visionary mysticism, and from mere fervors of emotion. It lay unobtrusive, deep down in the roots of the character, and brought forth real, substantial fruit.

We cannot do better than to quote here out of a letter we have from Prof. Edward D. Morris, of Lane Theological Seminary, who, when Mr. Stone was in Columbus, was pastor of the church with which he was connected.—“As a Christian man, though he was always diffident and full of doubts as to himself, I invariably found him true, manly, devoted to the welfare of men, and especially of the church. He was a very zealous actor in all church enterprises, and as trustee and in other such ways proved himself of great value. His

departure left a vacuum which it was hard to fill. He often took part in our prayer-meetings,—speaking and praying warmly, pointedly, and with effect. He more often prayed than spoke; though I used to rely upon him in the latter direction, and was always glad to see him rise and address us.”

So it was substantially in Hartford; and, especially, in the post of Sunday-School Superintendent, which he filled before his removal to Ohio, his efficiency was most remarkable.

His devotion to duty was of the self-denying, self-sacrificing sort. He never consulted his own ease, or yielded to self-indulgence in any shape, to the neglect of duty. His pains-taking care was extended constantly and unweariedly to minute and irksome details. His labor did not stop short with the absolute requirements of duty, but was generously and freely given in whatever way he could promote the interests entrusted to him or those in which his services were voluntarily enlisted. Prof. Morris says of him:—“His work in the Asylum [at Columbus] was worthy of all praise. I observed that work closely and from year to year,—and can safely say that a more conscientious, pains-taking, practical, efficient man in such a position I never knew.”—As principal, at Hartford, he voluntarily assumed cares and labors of domestic supervision and guardianship, which had never been assigned to that office. This was unrewarded while he lived, and done with no expectation and no claim of pecuniary remuneration; though, after his death, it was honorably and gratefully recognized by the directors of the institution in an appropriation for the benefit of his family.

Not only was his unselfishness evinced, negatively, by the absence of self-seeking, but he had a goodness of heart which went forth in active kindness and generosity to others. He was not only most affectionate, kind and generous toward his kindred, and solicitous for the welfare of his pupils, but many who had no

special claims upon him experienced kindness at his hands which could have sprung only from an uncommon benevolence of disposition. There were peculiarities which veiled, to the casual or the careless observer, his kindness and sympathetic tenderness of heart. His modesty made him utterly averse to effusive demonstrations of feeling. His urgent, positive, persistent, peremptory nature gave to his manners at times a touch of roughness which might have been mistaken as indicative of an ungentle and unamiable temper. His strictness in discipline may possibly have sometimes been seen from so partial a point of view as to wear the look of harsh and unfeeling severity.

His kindness was the direct opposite of that specious good-nature which is merely an indolent, yielding compliance, or a superficial varnish of essential selfishness. As a disciplinarian, while he held the reins with a firm and steady hand, and was prompt in the use of a salutary severity as occasion required, he was ever kind and considerate, never capricious or unfeeling. He was a firm and constant friend, and if he had his personal aversions, they generally rested upon good grounds. No jealous or envious feelings were harbored by him. Though a hearty antagonist in a controversy, he was not at all of a contentious or quarrelsome temper. The better he was known, the more fully apparent was his genuine goodness of heart. Those who knew him in the intimate privacy of his own family, as was for some time the privilege of the writer of this imperfect tribute to his memory, can testify that within those revealing precincts, where only the true man shows to advantage and the selfish and base are unmasked, and where all flaws and stains are brought to light, he was seen to be, through and through, a genuine, kind-hearted, tender-hearted, large-hearted man.

Modesty was a marked characteristic of Mr. Stone. He seemed to have, in an unusual degree, a just estimate of his own capabilities and his own performances.

He certainly never over-estimated them, and his tendency was rather to self-disparagement than otherwise. Instead of being buoyed up and impelled forward by a conceit of his own superiority or a love of display, his diffidence was a repressing force which it required an effort of manful resolution to overcome. He never weakly shrunk from any duty for this reason; though, no doubt, a larger measure of self-confidence than he possessed would many times have been of essential advantage. He was in no degree elated by promotion, and never put on any lofty airs toward his subordinates or anybody else; and, with all his positiveness, he was never offensively dictatorial in manner. Though adhering very firmly to an opinion once formed, he was ever disposed to seek advice from those competent to give it. At the time when he was put in charge of the American Asylum, the old system of government by the faculty was, by the action of the board of directors, done away with, and the internal administration committed to the absolute control of the principal; yet he did nevertheless consult his associates in such a way that, for a long time, none of them had any knowledge of the transfer of authority. There was, indeed, in this something more of stratagem than was at all usual with him; but it proceeded simply from an unaffected modesty, and was in accordance with the reluctance which he had sincerely expressed to occupying a station over the heads of men as old or older than himself.

It was characteristic of him in general to pursue his ends by efforts direct and open, and not by finesse or management. He could indeed, at times, maintain a prudent reticence, and he saw well into the characters of those with whom he had to deal. Yet his way was to carry his point rather by energy of will than by tact or by indirection of any kind.

His exceeding persistency was one of his most obvious and prominent traits. His instinctive impulse was to insist and adhere, and not to yield to opposition. But this

was counterbalanced by his strong sense and his essentially modest and candid temper of mind. But for this rectifying and controlling under-current, the trait to which we refer might have made him disagreeable as a companion, and wrong-headed and impracticable in affairs. If his persistency ever seemed excessive and unreasonable, it was more so in appearance and on the surface than in determining his actual conduct in affairs of importance.

This trait, together with his cautious temper and his matter-of-fact common-sense, would incline him to a safe conservatism, as opposed to hasty innovation. He was not the man to be captivated by any visionary scheme, or tempted into venturing upon untried novelties. Yet he was ready to welcome any plainly demonstrated improvements; and he was not of those who cling to the old, because it is old, with a blind and over-weening attachment.

His thoroughness was remarkable, and manifest in every thing he put his hand to. As an instance, the writer of this well recollects,—when, years ago, there was a considerable sum to be disposed of as the proceeds of a bequest for the establishment, or the replenishing, of a teacher's library for the Sunday-School of the Center Church in Hartford,—the vast pains which he took and the thorough method he pursued, by correspondence with men best qualified to give advice, and in other ways, in order to make a fit selection,—and the further labor he took upon himself to get the volumes prepared in the most complete manner to be set up for use. His habits of thoroughness made themselves apparent in all his personal appointments and surroundings. Any thing shiftless, slipshod, or left at loose ends, was utterly repugnant to his nature and his ways.

Mr. Stone was altogether a man made for action, propense by nature to energetic activity, rather than to contemplation or to study for its own sake, or to the cultivation of the esthetic faculties. His study and reading,

after he entered upon his professional life, was mostly done as preparatory to some active duty; and for such ends was faithfully done. The esthetic nature was developed in him as the product of well-balanced intellectual and moral faculties, and of a love of thoroughness and order, rather than from any special proclivity or any direct culture.

Mr. Stone was happy in having naturally a cheerful disposition. He delighted to unbend in sprightly social converse. His laugh was a hearty one. He never lost his relish for the sports in which during his boyhood he had engaged with so keen a zest as to divert him too much at that time from serious occupation. He enjoyed especially those games, whether active or sedentary, in which there is a competition in alertness and dexterity and energetic effort. He was skilful at the royal game of chess, and sat down to it for an occasional season of recreation even in the later years of his life. For his ordinary recreation, a good horse was what he most of all preferred; and few are more expert than he was in the control of a spirited animal, either in harness or under the saddle. There was no person with whom, on a drive, we should have felt more entirely safe with he reins in his hands. As to the manner of his death we cannot cease to wonder, or to suspect that there must have been circumstances connected with the accident, which never have been, and never can be brought to light.

As a preacher in the pulpit—the natural defects already mentioned detracted from effectiveness in delivery; his modesty made him reluctant to be put forward, even occasionally, into any prominent position as a preacher; and, during the greater part of the time while he was principal at Hartford, it was his custom, with occasional exceptions, to conduct the religious services in the chapel of the institution in the afternoon of every Sunday, thus leaving him seldom at liberty for any other preaching. He received ordination after his removal

to Columbus, and while there he ministered frequently for feeble parishes in the neighborhood, but was seldom induced to enter the pulpit in the churches of the city, unless to supply an occasional vacancy, evincing in this both his modesty and his benevolence. Had he taken the ministry of the gospel for his exclusive vocation, we can hardly doubt that, with his sterling qualities of heart and intellect, and his energy applied to the overcoming of his defects of oratorical delivery, he would, in that sphere, have been eminently useful and successful.

As a writer, though Mr. Stone had no large opportunities for cultivation in the way of practice, the readers of the *Annals* do not need to be told that his productions are marked by vigor and orderly sequence of thought, and by correctness of taste, clearness, aptness and force of expression and harmony of structure. That, upon a suitable occasion, he could write in a style of finished and impressive eloquence, was made evident in the Address delivered at the Ohio Institution in February, 1869, and published in the *Annals* for April, of that year.

This record of the life of our friend would be incomplete without some reference to a severe domestic affliction which fell to his lot when in Ohio. A daughter, in the fresh bloom of childhood, who had already developed a character of rare loveliness and unusual promise, was accidentally and fatally hurt by the revolving beam of a horse-power with which she and her playmates were amusing themselves, and, after a few hours of suffering, closed her eyes in death. The loss was hard to bear, and under such circumstances was peculiarly distressing; but was endured with the resignation and fortitude of a devout Christian and a trusting believer. Two years later, another daughter, at the age of six years, fell a victim to typhoid fever.

We are happy to be able to add the following sketch of that part of Mr. Stone's life which he passed in Ohio, furnished, at our request, by S. M. Smith, M. D.,

a professor in the Medical College at Columbus, at present the physician to the Institution for the Deaf and Dumb, and a gentleman who has always taken a warm and active interest in its concerns. We had already penned what precedes, when Dr. Smith's communication came to hand.

"The sudden termination of the brief yet eminent career of Mr. Cary as the chief executive officer of this institution, which occurred Aug. 7, 1852, gave especial interest and importance to the selection of his successor. A careful consideration of the demands of the institution and the qualifications of the various candidates available resulted in the unanimous choice by the board of trustees of Mr. Stone.

"His administration, extending through eleven years, was characterized, every act of it, by ability, skill, discretion, fidelity and courage. At his coming he gathered up the loose ends of disorder and confusion among the pupils and infused throughout the official corps a spirit of cheerful co-operative industry. His acute observation quickly discerned the defects or blemishes of every situation, and his experienced judgment as quickly furnished the ready hand with the proper corrective. The purity, vigor and elevation of his character drew to him the unquestioned respect of his associates as well as the veneration of his pupils. While possessing a gentleness and tenderness leading him to sympathize easily with the lowly, he uniformly won the acquiescence of the strong and subdued the will of the stubborn by his own superior force of mind and purpose.

"Upon his arrival here, true to his conscientious regard for the interests of the deaf and dumb, he promptly took up the well-nigh thankless task of urging upon the public the necessity of enlarged accommodations for the institution. All the honorable influences of argument, persuasion and personal solicitation he persistently and earnestly applied year by year. Often baffled, once in

the very moment of success, he acknowledged no discouragement, but resumed the cause with the enthusiasm of a fresh enterprise. The present unequalled structure for the education of the mute youth of Ohio owes its existence, more than to any other cause, to his influence, fruitful still, years after his removal from the State.

"His relations to the community were those of the cultivated gentleman, the honorable citizen and the working Christian. An apparent sternness of character disappeared upon any call for a gentler expression of feeling. It was his lot to share in the common trials and bereavements of life. When the shadow of death beclouded a clear sky, and from the midst of family happiness and security a dear little one, under circumstances of unusual agony, was called to her rest, his supporting trust endured the bitterness with a gentle submission that revealed the deeper currents of his heart and character.

"When, two years ago, a thousand of the immediate patrons, supporters and controllers of the institution assembled to open formally with suitable services the building just completed, all eyes turned to Mr. Stone for words suggested by the occasion and worthy of it. And, in August last, when the graduates and officers of the institution gathered for re-union services, every hand indicated Mr. Stone as their chief executive officer once more.

"The news of his death shocked this community as only the loss of a fellow-citizen could. His name and fame are written upon the memory and enshrined in the hearts of the citizens of Ohio, and their enduring memorial is found in the character which he enstamped upon the policy of the institution to which his professional labors and personal sympathies were so entirely devoted for a period so prolonged."

It is but a short time since many of us who were his fellow-workers in the education of the deaf and

dumb, were present with Mr. Stone in the convention at Indianapolis, where he won unanimous approbation and added to the esteem with which he had before been regarded, by the dignity and urbanity, and, we may add, the modesty, with which he discharged the duties of his position as president of the convention. His few, simple, heartfelt words at the close of the proceedings were characteristic of the man.

Though the end of his life came suddenly, and before his capacity for active service was sensibly abated, yet he had filled up the full measure of the work of a life-time. His active disposition and habits might have made rest on earth uncongenial, had his life been prolonged. He has found his rest in another world. *Rest* we call it; and so it is to be regarded, viewing it as a release from the burdens, the vexations and trials which weigh upon the happiest of human activities; but otherwise we are to regard it as a promotion to a higher and nobler sphere of action, of wholly cheerful and joyous activity,—the reward of him who on earth proves himself, as did our departed friend, a *good and faithful servant*.

The Annals—The present number of the *Annals*, like the last, exceeds the usual size of this periodical by several pages. A large amount of miscellaneous and other matter prepared for this issue has been crowded out, and will appear in the July number. The printer promises that the *Annals* shall appear more punctually in the future.—
ED. ANNALS.

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ARITHMETIC FOR DEAF-MUTES.*

BY RICHARD S. STORRS, M. A., HARTFORD, CONN.

Our first proposition is, that Arithmetic should be taught to deaf-mutes as an applied, and not as an abstract, science. Whatever may be the utility for ordinary children, of abstracting numbers from existences, to deal with the mathematical relations of the former only, according to formulas based on their inherent properties, a wise economy of time and effort forbids claiming much of the time of the ordinary deaf-mute for such mere mental gymnastics. Not, indeed, that this kind of mental effort offers any peculiar difficulty to the deaf-mute; on the contrary it seems an especially attractive field to most of this class. With peculiar relief do they seem to turn from the uncertainties of idiomatic language, to the fixed and definite relations of numbers; and there is no other exercise in which it is possible so long to engage the patient attention of the

*This paper was originally prepared for a "Teachers' Meeting" of the Instructors in the American Asylum: the subject under discussion being "Our Arithmetical Course of Instruction."

deaf-mute, as in the combinations of pure mathematics. This is true alike of the earliest arithmetical, and the most advanced algebraical, formulas and operations, so long as they are held wholly abstracted from concrete existences.

Of course, it is not to be denied that any exercise which can accomplish even so much as this, is of value. To confine the roving eye and mind in steady attention to almost anything, is a work of equal importance and difficulty; and the despairing teacher may be pardoned for a willingness to accept and use almost any exercise which secures this result. And yet, one who considers duly the extent and difficulty of the work which the deaf-mute has to accomplish, in the limited time allowed him, and under his peculiar disabilities, will be little tolerant of exercises which do not directly tend to acquaint him with real life.

Notwithstanding, then, the strong temptation to use long arithmetical operations for the purpose of confining the pupils' attention; notwithstanding the zest with which even a very young class will engage in such exercises; notwithstanding the certainty and rapidity with which a teacher can test the correctness of work which may have thus occupied the class a long time; and notwithstanding the praise which the superficial observer is always ready to award to success in such imposing exercises, we yet believe that they should be allowed to occupy but very little of the pupil's time at any stage of his progress. Numbers should be chiefly considered by the deaf-mute, in their relations to life and language.

Of course, then, we would begin with the concrete; *i. e.*, numbers should be taught to the pupil, at the very first, as adjectives, limiting substantive existences; and for some time should be considered in this aspect only. To facilitate this conception of them, these adjectives should, like others, be taught in their *word* form. The Arabic symbols, which so easily assume for them-

selves in the minds' conception a substantive character, should be deferred until the attributive character of the numbers, under any and every symbol, has become firmly fixed in the pupil's mind; and some concrete existence is instinctively enquired for, in connection with every numerical symbol. First impressions are proverbially powerful; and we are disposed to attach considerable importance to this suggestion.

While, however, we would as closely as possible associate this class of adjectives with ordinary descriptive ones, we do not overlook their peculiar character, in virtue of which they may be combined as no others can. It undoubtedly very greatly facilitates arithmetical operations, that the memory should be trained to give, instantaneously and unerringly, all those elementary combinations, by which we can accumulate or distribute our attributive numerical conceptions; and so long as the mind is ready to give the real meaning and value of each symbol, when challenged for it, no harm results from the substitution of the memory's service for that of the understanding. We would therefore devote all necessary time to familiarizing the pupil with all the elementary binary combinations.

Nor are these combinations so numerous, as to make this a very difficult task; *especially if the right kind of memory is appealed to*; and as this is a point of no little interest and importance, and underlies our entire theory of deaf-mute instruction, as well as this particular method, we ask for it a moment's special attention.

Memory is, as is well-known, of various kinds; or, more accurately, engages in its service various other faculties. Thus we find, the logical memory; the imaginative memory; the sympathetic memory; the sensational memory; and this last, again subdivided into the tactile, visual, aural, nasal, and lingual memories; all these varieties being found in different persons, according to their characteristic organizations or occupations. Owing, doubtless, to the peculiar vividness of the im-

pressions conveyed by the eye, it results that the *visual* memory of most persons is noticeably more reliable than the other varieties. The point to which we wish to call special attention is, that this is pre-eminently true of deaf-mutes. In the very nature of the case, their reliance must be almost wholly upon the visual memory. Of course, then, the skillful instructor of deaf-mutes will accept this fact as fundamental; basing upon it his entire theory of instruction and developing from it all his practical methods.

At some other time, we may attempt to show how great advantage might be expected from a clearer recognition of this principle, in teaching every study, indeed, but pre-eminently and emphatically, *language*—the deaf-mute's first and last and constant study.

We desire, however, at this time, only to call attention to the fact, that by leaning upon this kind of memory in acquiring these elementary numerical combinations, of which we were speaking, not only is the ordinary advantage of greater vividness and permanence secured, but *the number of combinations to be acquired is reduced one-half, and, still again, one-half more.*

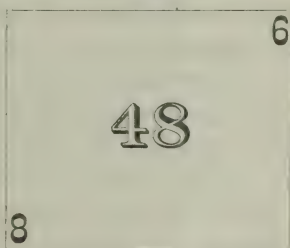
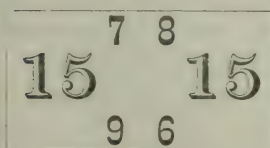
This results, first, from the obvious fact, that the subtraction and division tables of our arithmetics are simply the converse of the addition and multiplication tables: and, in the second place, from the further fact, that every combination of the addition and multiplication tables may be read both backward and forward, and must be memorized both ways by the common method, although the two statements represent only one real combination of numbers.

For example, "9 and 2 are 11" is a totally different aural combination from "2 and 9 are 11"; as also is "6 times 8 are 48", from "8 times 6 are 48"; although the paired combinations are respectively identical in contents. Reducing, now, all the binary combinations of the digits to this reality, and excluding all empty, or identical, combinations, based upon the cipher

or unit in multiplication, and upon the cipher in addition, we find the total number of the addition and subtraction combinations to be only forty-five; and those of multiplication and division, only about thirty; in the place of four times these numbers as usually given for the aural memory. On this ground alone, therefore, we would unhesitatingly discard the ordinary tables, in favor of any method of visual presentation, which should truly represent the actual combinations; as well as on account of the greater vividness and permanence, which we should thereby secure. Two series of "combination cards," which the writer devised for this purpose some years ago, have been since found so exceedingly satisfactory in use, as to justify a somewhat full description of them here.*

The first eighteen numbers, of course, represent all the possible addition combinations of the nine digits; eighteen cards, therefore, are used, each about twelve inches by eight. At each end of a card, is printed, in very large figures, some one of these eighteen numbers; the same number at each end, but a different number for each card. Between these two large presentations of the number to be resolved into its components, each pair of these components is printed in smaller figures, with space enough between them to show them as separate, but without either the plus or minus symbol. It is evident that the larger number to be

*The actual exhibition of the cards in use, at the original reading of this paper of course superseded the necessity of any written description. In their absence, the subjoined diagrams may perhaps usefully supplement the description here attempted; although the verification dots, referred to, are necessarily omitted.



resolved, being thus shown on each side of its several pairs of components, these last may be read either backward or forward. Taking, for example, the number 15, we find its only pairs of components to be 9, 6, and 7, 8; which would, however, require *four* different verbal statements. The eye, reading them as readily backward as forward, finds the *two* visual statements equally satisfactory. Obviously, also, the same visual statements answer equally well for subtraction; *the memory having only to present the whole card-face*, and immediately the difference between the large number 15, at each end, and the nearest figure of either central pair, is seen to be the other figure of that same pair. Thus, these *two* visual statements, really represent no less than *eight* verbal statements of the ordinary tables. The total number of the visual statements, *i. e.*, paired components, upon the entire series of addition cards is, as we have said, only forty-five. Of these, twenty one are contained upon the five cards which exhibit the large numbers 8, 9, 10, 11, and 12; the acquisition of which will therefore constitute much more than half of the work required.

For the multiplication series, similar cards are used; differing only enough, in size and appearance, to enable the pupil easily to hold the two series separate in his mind. Let them be twelve inches square, and of some differently colored pasteboard from the addition series. Thirty-five such cards will be required, there being in the range of numbers from 2 to 81, just so many possible combinations of the digits, as factors; excluding, as we have before said, the merely formal and identical combinations of the unit figure with the other digits. Upon the middle of each card, print, in quite large figures, some one of the numbers to be factorized. In much smaller figures, print, at diagonal corners, the two factors of this central number. It is obvious that in this series also, as in the former, two verbal statements of the ordinary tables, are adequately given by

the one visual statement of the card; the central number 48, for example, being readily apprehended as the product of the corner factors, 6 and 8, *read in either direction*. Moreover, as before, the converse statements of the division tables are with entire ease deduced from these same visual statements; the central number and either of its factors instantaneously giving the other. Each visual statement of these cards, therefore, as of the others, is the equivalent of *four* verbal statements of the tables.

Thus the nearly four hundred verbal statements of our ordinary tables, are all adequately expressed, *visually*, upon these less than fifty cards, of both series.* The only and indispensable condition of the successful substitution of the latter for the former, is, that the entire appearance of each card shall be so vividly impressed on the memory that the mind shall always readily and truly recall it. This result the writer's class experience has demonstrated to be entirely and easily attainable, with all but the very dullest pupils. By exercising due care in the slow presentation of the successive cards, at first, for mastery; by constant subsequent practice upon them, in requiring the ready statement upon the fingers of all the components or factors of any given number; and by giving the cards, finally, a permanent place upon the school-room walls, where the pupil's eye may always encounter them, except when intentionally covered or removed; his final hold upon these mental pictures becomes surprisingly ready, accurate and tenacious. The writer has thus secured, far more quickly and perfectly than by the former use of ordinary tables,

*Since five of the numbers to be factorized, *viz.*, 12, 16, 18, 24, and 36, are each resolvable into two sets of factors, the number of multiplication cards might be reduced to thirty, by using the four corners of the five cards which exhibit these numbers, for their respective four factors, paired diagonally; and thus dispensing with the five duplicates of the large numbers. The single card exhibiting the number 24, for example, would then have the factors 6 and 4 in two diagonal corners, and the factors 3 and 8 would occupy the other two. There might even be some advantage for the memory, in thus calling special attention to these five numbers, so variously divisible. The verification dots, however, soon to be described, could obviously not be used upon such doubly significant cards.

such familiarity with these combinations, as banished from his classes that babyish finger-counting, too commonly seen.

Another incidental advantage of this method of presenting the combinations, is, that verification dots may be printed upon the same face of the cards; by the side of the components, on the addition cards: and on the multiplication cards, in a central block, whose horizontal and vertical rows shall respectively correspond in number to the corner factors; the total number of dots in the block, corresponding, of course, to the large central number. Each visual statement may thus be conveniently verified, when first presented; and the possibility of such verification, thereafter constantly suggested to the eye; a point quite in harmony with that concrete treatment of all arithmetical relations, on which we have already so strongly insisted.

The faithful use of these cards in the manner suggested, will enable the teacher to dispense with much of that common practice-work, in long abstract operations, the only use of which is to familiarize the pupil with these combinations. Far more fruitful in every way is the concretion of these combinations in the facts and relations of real life, which cannot be too early nor too constantly required. The very first presentation of numbers should be, as we have said, in this concreted form, in their attributive application to the various objects presentable in the school-room, and to the verification dots of the combination cards; and from this beginning, onward, the class should be constantly exercised in simple practical problems, instead of long abstract operations. Do not wait for them to master all the combinations; but as soon as they can combine even two and two, instruct them in the aid derivable from this combination, in settling some supposable bargain of their own. In stating these problems, use sometimes the Arabic symbols, and sometimes words;

but, always and ever, drive them behind both words and symbols, to the real facts.

Of course, these problems must be mainly prepared by the teacher, and expressed in language conformed to the linguistic progress of the class. Especially must the teacher here heed the motto, "*festina lente*". No printed arithmetic gives a tithe of the examples, which it would be desirable for a class to consider and solve, under each forward step in principles. Not a day should pass, from the middle of the first year to the end of the course, without something of this practice. Such faithfulness and persistency would not only render our pupils more proficient in abstract operations than they often are, but would also make of them much closer translators, and more careful writers, of ordinary language, than is now usual. Its influence in sharpening the attention, and in training the mind to appreciate the relations of facts, as well as the quiet but absolute test which it applies to the correctness of the pupil's apprehension of written language, are all peculiarly fitted to dissipate that vagueness and haziness, which seems to envelop ordinary language in the minds of many of our pupils.

The points maintained thus far, *viz.*, that the pupil should never be allowed to lose sight of the real powers of numbers; and that his attention should be directed to applied arithmetic, rather than abstract; are points which apply equally to all parts of his arithmetical course; and are a very general answer to the very comprehensive question assigned me, "How best to teach arithmetic to deaf-mutes". One or two other suggestions, of equally broad application, but of minor importance, may be made, before considering the more specific questions of number, and orderly succession of topics; and practical methods in each.

One of these general suggestions is, to ignore and avoid all the mere curiosities, felicities, and abbreviations of straightforward and simple processes. Spend no

time, for example, in teaching an ordinary class even so simple a thing, as, that multiplying by the factors of a number gives the same result as multiplying by the number itself. Not that you would find any difficulty in making them understand it; but that the occasions when it would be any convenience for them to factorize multipliers, would be so very infrequent, that the time spent upon it now would be practically wasted. So of all devices for multiplying by nine, five, or other numbers, in any except the common way. So of the whole doctrine of prime numbers, finding common multiples, and others, whose only use is, to facilitate and explain abbreviating processes. Even for ordinary pupils, most of this is of very doubtful utility; and the tendency to incorporate such superfluous matter into text-books, has become a very great evil. In this respect, at least, the arithmetics of twenty years ago are better than those which have superseded them. But emphatically is this true as respects deaf-mutes. To nothing but the simplest, most direct processes should their attention ever be directed, that time may be gained for that multiplicity of real-life examples which we have recommended.

Another general suggestion is, to refrain from attempting to explain to an ordinary class the philosophy of the processes and methods you teach, except so far as may be necessary to their correct apprehension of the real effect of their work upon concrete existences. For example, it is undoubtedly essential that the pupil should clearly comprehend the number of units represented by the symbols 14; but it is not equally, nor indeed at all, essential, that he should clearly understand the full theory of the local values of these symbols. Such philosophizing may be very interesting and easy to the adult mind, but it is very dry and difficult to the immature child; and especially undesirable for the deaf-mute child. I do not mean that there is any more difficulty in making the deaf-mute comprehend such

abstract reasonings, by a skillful use of the sign-language, than there is, in making the speaking pupil really take in the same ideas from verbal explanations; but the time thus occupied is more precious to the deaf-mute for other uses. Here, again, our modern arithmetics are inferior to former ones, which gave processes, and not theories. The modern author too often forgets or ignores the real want of the student; and seems chiefly desirous of exhibiting his own learning or ingenuity. For this reason, as well as from the paucity of examples under the different processes, the teacher of deaf-mutes is almost compelled to provide his own arithmetical course of instruction. The very smallest and simplest compendium of rules and tables which he can find, is the best for him; and this, he puts in the pupil's hands, only for reference. *

Another general suggestion is, that very little, if any, time should be spent in memorizing rules, so called; *i. e.*, short and sharp statements of the exact process to be performed. No pupil, deaf-mute or other, really leans upon such verbal directions. They are only intelligible to him, as descriptions of processes after they are wrought out. As such descriptions, they should be diffusive; expressed in language similar to that used by the pupil at that stage of his progress; neither more, nor less, exact and concise. The pupil should thus make his own rules; and a very interesting expedient of practical instruction is, for the teacher to attempt to perform examples in reliance upon, and following exactly, the pupil's written rule; of course ingeniously deviating from the true way, wherever any omission of the pupil leaves a possibility. This would tend, most decidedly, to cultivate sharpness of thought, and accuracy and

* Since writing the above, the writer has become acquainted with, and used for some time, Felter's Practical Arithmetic. It is only just to say that the abundance, simplicity of language, and skillful gradation of its practical examples greatly recommend it. In this feature it will be found a valuable book for deaf-mute instruction.

adequacy of linguistic expression; but it is an entire mistake to suppose, that, if the pupil loses his visual memory of similar previous processes, he can fall back upon an exactly memorized rule, as his guide. Indeed, the attempt to lead him to do so is highly injurious in every way. The immature mind of the pupil wearies under such close and continuous attention to language charged with a weight of meaning so much in excess of his own natural style; refuses to follow each turn of the phrase whose every word has an important bearing on the whole, with no possibility of even safe transposition; and only finally takes up the whole by memory, as a dead weight; than which, nothing can be more prejudicial, both to his arithmetical and linguistic progress.

Half-way between these general suggestions, and specific methods, is a question of the *number* and *order* of topics to be presented. These, we would reduce to the fewest possible; omitting everything not of the clearest practical importance. The chances are very much against our pupils' ever having occasion to use one half of the processes explained in our common arithmetics; it is extremely difficult to make sufficiently real to them the circumstances under which they might have such occasion; while, if they are thoroughly familiarized with the more common processes, they will have confidence to attempt the mastery of new ones in subsequent life, whenever their experience may require.

Of course, the fundamental topics of notation, numeration, addition, subtraction, multiplication and division should earliest engage the pupil's attention, and in this order. Federal money may follow these, or might even be easily taught in connection with their practical examples under these processes, beginning with addition. Fractions should certainly come next in order, and should be very fully and carefully treated. Compound numbers may then safely follow, without in-

convenience from the tables which involve fractions. The plainest and simplest principles and processes of Interest, will be all that the ordinary pupil will further need in real life. Far more important to him, than the ability to extract the square root, or to perform any other difficult operation, will be the power to solve examples involving the preceding processes, by the analytic method; which is simply the application of close thought to *the proper statement* of the sum. Proportion, it used to be called, and reserved until the later stages of arithmetical progress; but, in truth, its use can hardly be commenced too early, or be too perseveringly continued.

The simpler forms of account-keeping, of bills, notes, etc., will, of course, be explained at some time during the latter part of the course, and practice be encouraged in making them, to some extent. Thus our pupils would be as well-furnished for the ordinary transactions of life as is the average farmer or mechanic. So much, he certainly should have, and much more he, as certainly, does not require.

The *best practical method* of teaching each of the topics, thus admitted into our arithmetical course, is obviously a most important remaining question, and may have been the one really contemplated in the subject assigned. Independently, however, of the consideration, that all written descriptions of methods are necessarily obscure and tedious, it may almost be said, that each teacher should work out his own methods; so certain is it, that such methods will be most successfully employed by him, if by no one else. One general principle, may, however, be laid down, as a corollary from what has already been said; and its faithful application would illuminate every topic. *Some method of visual illustration should always be sought for*, and, in proportion to the aptness of this appeal to the visual memory, will be the deaf-mute's success in gaining and retaining principles. To describe, in detail,

such methods of this kind of illustration as the writer has himself used with advantage, would far too much extend a paper already too long. One or two mere illustrations of his meaning must suffice.

In *denominate numbers* the exhibition of the various tables somewhat pictorially upon a double series of steps or stairs, ascending and descending, instead of in the usual tabular form, has proved of great advantage. The changes from the numerous small integers of the lower denominations to the fewer but larger ones of the upper, each suggested by the number and size of dots on the flats of the stair; the direction of progress in working these changes as indicated by arrows pointing up or down; the manner of effecting such changes, as shown by symbols of multiplication or division placed upon these arrows; the location of the numerals of the tables at the inner transition angles, between the successive denominations, the denominations themselves being exhibited in abbreviation at the outer angles; and, finally, the distribution of the whole over so wide a surface as to favor distinct and separate visual impressions from each important feature, all greatly assist the pupil in apprehending and retaining both the contents and theory of the tables. Each table is a mental picture forever, and, from his own experience in their use, the writer can give the most emphatic testimony to their utility.

Again, in *fractions*, the free use of the *circle* as the *pictorial unit* greatly assists in giving the true "fractional" idea. These circles should be subdivided by *radii* into equal parts, corresponding in number to the denominators, and such a number of these parts as would correspond to the numerators should then be lightly shaded. Of course, the whole shaded area in any given circle represents the value of that fraction. By illustrating every proposed operation in fractions, from the very outset, by such circles, even the dumbest pupils may be made to comprehend the nature of the problem, and the effect of the various changes upon the real

values involved. This last conception, too, of the *Value of the fraction*, as being something entirely distinct from the figures of either the numerator or the denominator—the most difficult and yet most essential conception of the whole topic—may be very advantageously symbolized to the pupil's eye by enclosing the fraction figures within a large V, representing this abstract Value, and also attaching below this symbol a circle, subdivided and shaded as before described, to show the real value of the enclosed fraction. Such symbols and fractional expressions may be arranged in various series of increasing and diminishing values, the size of the V symbols varying to correspond; and, by the skillful use of the whole method, all those changes in fractions, which too often seem to the pupil only so much arithmetical legerdemain, may be most easily and beautifully illustrated. It is, of course, impossible to do more here than hint at the various adaptations which actual use of these and similar illustrations by any skillful teacher, would soon develop. These adaptations will be found surprisingly numerous and varied, and their free use will invest the whole science with new and peculiar interest.

A final question, of *the time* to be allowed to each of these topics of our course, need occupy us but a moment. It should probably vary somewhat with different classes; but need not to such an extent as to prevent our marking out the work of each successive year of an ordinary term of study. Constant practice upon ground confessedly familiar, enters so largely into our plan, that the result of such previous designation would simply be, more of this practice for a bright class, and less for a dull one. In such a course, the fundamental rules and federal money should occupy the first three years; the fourth year should be given to fractions; the fifth to compound numbers; and the sixth to interest. Even if fractions were not commenced until the fifth year, time would still be left in

the ordinary seven years' term for the full development of each main topic, without curtailing the desirable amount of practice-work in real-life analytic examples, which we have assumed to pervade the entire course. Arithmetic being the only study, aside from language, which is steadily pursued during the pupil's whole term, some such thorough systematizing of time and topics is greatly to be desired.

[The foregoing paper elicited some discussion at the time it was read, some notes of which are here appended for the sake of completeness.

It was suggested by *Mr. Collins Stone* that it was entirely unnecessary for the pupil to memorize, in any way, the components of *eighteen* numbers; since it is quite sufficient if he can thus analyze the *nine digits only*; having, however, at the same time a perfect and instantaneous apprehension of the relation of all these smaller components to the number 10. In combining any two digits, then, whose sum exceeds ten, one of them must be mentally resolved into such components that one of these components and the other digits shall equal ten, and then the other components be added to the ten thus formed. Thus, instead of saying 7 plus 8=15, as in the direct combination method, we should by the decimal analytic method say, 7 is less than 10 by 3; 8 is resolvable into 3 and 5; 7 plus 3=10, and 10 plus 5=15. *Mr. Stone* claimed, that, as this method deals with much smaller and fewer combinations (only twenty in all), and as each one of these may at any time be verified upon the fingers, not only is the labor of acquiring them far less, but the pupil will repose with greater confidence upon the results of this analytic process, than upon the bare affirmations of the larger direct combinations. He claimed, also, that this method much more clearly brings out, and keeps in view, the steadily progressive character of successive additions—which he illustrated thus. If, in adding a column of figures, we

have reached an aggregate of 28, and the next figure to be added is 7, by the direct combination method dealing first with the units, we say $8 \text{ plus } 7 = 15$, with no accompanying conception of the 20 in our previous aggregate; to which we subsequently return, however, increasing it by the 10 of our new 15, and finally uniting therewith the remaining 5. This, Mr. Stone claimed to be a broken and retrogressive process, obscuring its real progressive character. By the decimal analytic method, on the contrary, we hold consciously in mind the 28 already acquired, perceive that 2 is required to complete the next 10, resolve the 7 into the components 2 and 5, use the 2 to progress to 30, and then the 5 to progress to 35.

The writer suggested a practical expedient, obviating the second objection; *viz.*, Train the pupil to hold the tens upon the fingers of his left hand, while taking the units of the direct combinations upon the fingers of his right hand, and to change and increase each, as the aggregate increases, the mind meantime holding both hands in view, as servants of one process; its progressive character can, thus, hardly fail to be clearly apprehended. To illustrate, suppose a column of figures, 5, 7, 9, &c. The memory gives $5 \text{ plus } 7 = 12$. The left hand takes the 10 upon its thumb; the right takes the 2 upon two fingers. The memory again says $2 \text{ plus } 9 = 11$, and the left hand takes the new 10 upon the index finger, in addition to the former 10 still held by the thumb, while the right hand substitutes the 1 unit of the 11, in place of the 2 which it was before holding. The mind combining the work and final contents of both hands, recognizes progress to 21.

Attention was also called to the fact, that this concise and convenient method of hand-notation, enables the pupil to dispense with the recording in figures by the side of the column, either the successive combinations, or their aggregate at any given point; as suggested by Mr. Keep in his paper in the *Annals*,

Vol. VIII., Page 110. Also, that it dispenses with the pupil's copying or writing the sum at all; since, with trained eye and hands, every pupil of a large class can be, at the same moment, adding the same sum, exhibited in sight of all upon the teacher's slate.

Mr. Keep advocated the direct combination method, in distinction from the decimal-analytic; but would teach the combinations by his own tabular method, detailed in the printed article already referred to. He also dissented somewhat from the positions of this paper in respect to abstract arithmetic, and read a paper in support of his views.]

WE ARE NOT RETROGRADING.

BY WALTER W. ANGUS, INDIANAPOLIS, IND.

The disposition which has been shown to compare the degree of success attained at the present day, in the education of the deaf and dumb, with the supposed, or asserted, point of attainment in earlier years, when the bridging of the chasm, which, in previous ages, had separated this class of unfortunates from the rest of their race, in all that concerned their social, intellectual and moral life, was first proved not only a feasible and promising experiment, but a practical success of important and wide-reaching consequences, and, from such comparison, to draw conclusions unfavorable to teachers and methods of to-day, seems to call for some inquiry into the reason and justice of such conclusions.

I claim kinship neither with those to whom the good time seems ever in the future, nor with those who seem ever to look back regretfully to the good old times of their grandfathers, or, perhaps, to a period still farther away in the realms of tradition. I refuse to believe that all devotedness, virtue or wisdom left the

world with a past generation, and I have no fear that they will die with the generation now making its impress upon the form and spirit of the world's life.

The present is too earnest and practical an age, and our working years are too few and evanescent, to permit our spending much time upon merely speculative theories in regions either of anticipation or retrospection. Still it may be well, occasionally, to look back over the past, as it has been traced on the tablet of memory, or recorded as the experience of those who have gone before us. We may draw from such retrospection conclusions or principles, which shall aid us in accomplishing better the purposes and duties of the passing hour. We may find it useful to study the rationale of successes or failures, by ourselves or our predecessors, and thence learn how, in the present and future, most certainly to secure the one and avoid the other. Each one will prefer sometimes not to be content with the verdict pronounced by others, however favorable it may be, but to judge of his own success by comparing the progress he has made, as indicated by his present position, with the advance he aspired to make when he set out; very much as the navigator takes observations, at intervals, to determine whether his actual position is what it should be according to his compass, chronometer and log-book.

It has been implied, in certain quarters, if not directly and distinctly asserted, that the deaf and dumb do not reach so high an average point of attainment in our day as they did in the earlier years of effort in their behalf, and, therefore, that teachers of the present day must be less devoted or less efficient than were those who preceded them, and not only fail to keep abreast of the march of improvement in other branches of human effort, but actually fall short of the standard reached by earlier laborers in their own profession. I believe the assumed premise to be at war with the fact, and the conclusions therefore unjust.

Certainly I have yet to meet one qualified, by age, and connection with our work from the earlier years in favor of which so much is claimed, to speak decisively, who has acknowledged any truth or justice in the charge. To me it seems that such a conclusion could only have been reached through failure to take the subject in all its bearings, and under all its conditions, past and present.

As one of the younger members of the profession, I feel some reluctance to obtrude my views or opinions upon the attention of many who have had far longer and wider experience. Still, having spent years in an honest effort to do my little towards the end at which we all aim, I hope it will not be regarded as presumption, if I ask permission to present some of the circumstances and conditions that have drawn my attention as bearing upon this subject, leaving the question of their originality and value to the judgment of my associates in the field of deaf-mute instruction.

In an article published in a late number of the *Annals* (Vol. XV., Page 104), the writer begins by saying, with reference to the implied charge above referred to, "The teacher of the deaf and dumb is often discouraged. He feels that he is not accomplishing all he would accomplish, nor all that is expected of him. Indeed, it has been intimated, if not directly asserted, and this too by one in high position, that the teachers of the present day are comparatively inefficient—that they do not accomplish as much in the advancement of the deaf-mute as did those of an earlier day. If such be the case—a point we would not pretend to dispute—there must be a cause or causes for such deficiency."

From this paragraph it does not clearly appear whether the writer of the article in question intended to be understood as confessing the justice of the implication, or as simply putting it aside, and confining himself to a statement of some of the difficulties which

teachers in this branch of educational work have had to contend with, alike in the past and present. Associate and friend of the writer of the article, as I have been for several years, I take this latter as the sense in which he intended to be understood, and, thus taking it, criticism of the article would be foreign to my purpose. Yet the article is susceptible of being taken in the former sense, and I suspect that many, not situated as I have been, would more naturally thus read it.

I wish it to be understood, however, that I particularize the article in question, not because of anything especially obnoxious in its apparent manner or motive, in whatever light it be read, but solely as being the latest public reference to the subject of the implied charge of inefficiency in teachers of our day. Simply as a statement of some of the difficulties which teachers of the deaf and dumb are called upon to meet, and, if possible, surmount, the view presented is, to say the least, not too strongly lined, as years of labor in this direction have furnished to me abundant and unpleasant experience. But assuming, for the time being, that the writer grants the general justice of the implied charge of inefficiency on the part of the present corps of teachers of the deaf and dumb, as compared with earlier teachers, and then proceeds to adduce explanation and excuse, I can not but think his explanation and excuse quite inconclusive.

Believing that by so doing I shall secure, more nearly, the conditions necessary for any thing like a fair comparison between the earlier and later years of deaf-mute instruction, I confine attention, principally, to the two oldest institutions in this country. Besides, the period at which progress ceased or retrogression began has not been very definitely pointed out, and I am therefore not forbidden the assumption that, however far or near in the past be the assumed stationary or downward turning-point, it is farther back than the birth of

a large proportion of our institutions. And, farther, when thus confined as to time and place, the question will be less liable to complication through foreign or, at least, merely temporary and accidental influences. Furthermore, I believe the two institutions referred to present a point of difference illustrative of the influence of emigration, as one of the phenomena of our national and social life, unparalleled in the history of any other modern people.

Referring to the article above mentioned, I find that the writer has grouped the supposed causes of the imputed retrogression under brief headings, and they are:

I. "The want of an efficient corps of experienced teachers."

II. "Defective elementary instruction."

III. "Misdirected effort on the part of the teacher."

IV. "A too early admission of pupils."

V. "Imperfect classification."

VI. "A too hurried attempt at progress."

VII. "A want of proper text-books."

In regard to the first specification, I may observe, in the first place, that had the writer put it, "the want of a sufficient number of experienced teachers," he would have simply stated a fact, known to all engaged in the work; but, instead, he pleads guilty to the implied charge without even calling for the evidence; a charge, too, of which the very least that may be said is the verdict of the Scotch jury, "Not proven." The burden of proof lies here, as everywhere, with the accuser. Secondly, a general and sweeping charge of inefficiency or want of zeal in our profession ought not to be made, and, still less, ought its truth to be admitted, by one of our number, until the case shall be more satisfactorily made out, because such a charge, proved, would involve, in these days of enlightened effort, a grave moral culpability in a class to which is committed so high a trust, necessarily carrying with it so heavy a responsibility.

So far as the question affects deaf-mute teachers, I imagine it will hardly be claimed that those first employed were superior in efficiency to the graduates of the High Classes in these later years. I will therefore leave this class of teachers out of consideration, except, perhaps, incidentally, in connection with some of the succeeding specifications. There is no question that hearing teachers were more numerous during the earlier years, relatively to the number of pupils, than at present. It remains to be proved, however, that a larger proportion of hearing teachers were more efficient than now, while analogy and experience, in related branches of human effort, are adverse to such a claim. It is not, indeed, to be denied that into our profession, as into other professions, incompetent or even unworthy individuals will sometimes find their way, notwithstanding all care and watchfulness in those whose duty it is to guard against them; but it has not been shown that this happens now more frequently than in earlier years.

Regarding the second specification, "defective elementary instruction," I have no data for instituting a comparison between early and later years. I will admit the probability, that, with the proportionately larger corps of instructors, and the relatively greater number of hearing teachers, at a period when elementary text-books designed especially for the deaf and dumb had not come into use, the advantage may have been in favor of the early days of deaf-mute instruction. We may offset this, however, more or less, by the text-books afterwards supplied, and the superior power of communication, through signs, possessed by our deaf-mute teachers.

In regard to "misdirected effort on the part of the teacher," I suspect that it is more than likely that, aided, as we are, by the labors and experience of our predecessors, there is less of it now than in earlier years.

If all the writer's points were as strong as the fourth, "a too early admission of pupils," he would certainly

go far to make out his case. As this element in our problem has assumed grave importance of late years, I will leave its consideration until I come to analyze the phenomena of our present condition, that have probably led some, who have not carefully gone over the whole ground, to imagine that our enterprise was retrograding.

With respect to "imperfect classification," I see, again, no conditions under which I should feel safe in instituting a comparison between the old and new, and drawing therefrom positive conclusions either way. I admit that, as teachers of the earlier years were more numerous than now, relatively to the number of pupils, the probability is that they could classify to more advantage, but that they actually did so I have seen no proof. To the possibility that they had an advantage on this point we may offset improvements dictated by experience.

In his sixth specification, if it were the writer's object simply to indicate some of the causes which result in the deaf-mute's making less advance than we desire for him, the point taken would be a strong one. If, however, I have correctly assumed his purpose, it need only be observed, that the probability is, that mistakes in the direction of too much haste have occurred at all periods, and it cannot easily, if at all, be determined whether the preponderance of error favors the past or the present.

I come now to the last specification, "want of proper text-books." In a comparison between the success attained in former years and that attained in our day, it is somewhat difficult to see exactly why a want of proper text-books should be brought forward to explain or excuse the imputed comparative failure of later teachers, except under the supposition that the writer regards the use of any books at all as a positive evil. The earlier teachers had no books adapted to the condition of the peculiar class they labored to educate. Yet it is plain that they considered this absence of

proper books a serious impediment in their course, as is evidenced in the production, by several of their number, of books designed to supply this need. In these books they at least attempted to embody, in permanent and multipliable form, the processes by which they accomplished the results, which are now claimed to have been so much superior to those attained by us, aided, as we have been, by the experience and labors of our predecessors.

Whatever be the assumed or admitted imperfections of books hitherto designed for the use of the deaf and dumb, it is certain that they have served an important end. But for them it would have been impossible to secure even the present insufficient number of teachers in this branch of educational work; for, without the guidance they have furnished, many deaf-mute teachers, who have done good work in the education of their companions in deprivation, would never have been able to accomplish what they have. With the aid of these books, these teachers, through their perfect command of the language of signs, have succeeded, during the first years of a deaf-mute's school-life, in communicating ideas and securing a development of the mental and moral powers, which the best hearing teacher could not have accomplished in the same time. In short, if there has been failure to reach the standard of earlier years, the fault must not be laid at the door of text-books.

As it deeply concerns the honor of our profession that the imputation of failure in efficiency, as compared with our predecessors, should be shown to be hasty and unjust, I will state what seems to me the probable and, indeed, only foundation possible for the imputation referred to; and this foundation is, in my opinion, possible, only in quarters where there has been neglect to take a wide survey of the entire field; a survey incomplete unless it embraces the whole philosophy of our national progress and the changes in our social conditions, during the period that has elapsed since the

enterprise of deaf-mute instruction took form and life in our country. Supposing I were to admit what, it might be claimed, is admitting the very point at issue: that, taking our pupils altogether, the average point reached is not as high now as in earlier years; it would, nevertheless, not be the point disputed, but merely the premise from which, through neglect to consider the situation in all its relations, an unjust conclusion is drawn. My purpose is to show what seems to me the rationale of this fall in the average standard reached, and then, with these causes of apparent retrogression in view, to claim, that, taking everything into consideration, there never has been a corps of teachers of the deaf and dumb of greater efficiency and success than that of to-day.

The considerations upon which I rely cannot be brought under such brief headings as were the points in the article to which I have referred. Each is to a greater degree independent of the others, except as it coincides in the production of one and the same result. The first consideration lies in the fact, that, necessarily, deaf-mute education being then an altogether novel undertaking in this country, the pupils, during those earlier years, were, to a large extent, of a superior class. Then the newspaper was not the power it now is, and, as a consequence, information was less generally diffused, as it certainly travelled more slowly. Those likely first to learn of the new enterprise would naturally be the more intelligent and better educated people visiting the larger towns to attend religious or political assemblies, or corresponding with other educated people living in or near the centres of religious, social or political influence. Learning of the new enterprise, those of them who had deaf-mute children would naturally be more prompt in taking advantage of the opportunity in behalf of their unfortunate children than less intelligent and less educated people. Then it should not be forgotten, that, by a large number, the success of the experiment was held to be more than doubtful, even in the cases of the more

intelligent deaf-mute children, and it would be natural to try such children first. Be the reasons what they may, such seem actually to have been the conditions in the earlier years. In our day it is different, for, with the success of the undertaking assured, and the more general spread of information, and a more intelligent recognition of the deaf-mute's condition, as well as of the principles of political and social economy, it has been more and more felt, that, the lower the condition of mental development, if it stopped short of absolute idiocy, so much the more claim had the deaf-mute to all that could be done for him. It follows, therefore, independently of other causes working in the same direction, and to be noticed hereafter, that, while the absolute number of intellectually well-gifted pupils has not diminished in our day, they form, of the whole number, a far less proportion.

Another consideration is in the age at which pupils are admitted. A hearing child learns language spontaneously, without effort, commencing before it can sit alone, at least so far as comprehension is concerned; but with the deaf-mute it becomes a different thing altogether. In his case, the acquisition of language takes the form of a task of supreme difficulty, and requires a mental effort, to which at best he is not fairly equal until he reaches the age of nine to twelve years. Previous to such age, it is, to use a mild expression, almost time thrown away to attempt his education in a class-room, while many hold it worse than a mere waste of time, except in rare cases. In the earlier years of deaf-mute instruction, most of those brought to the institutions were sufficiently mature to take up the task to the fullest advantage; many, indeed, were past the most favorable age. In our day, although, owing to ignorance, neglect, or less excusable reasons on the part of friends, there are still a few who enter too late, yet the almost irresistible tendency is, to get them into school while yet too young wisely to be divorced from a mother's

care, or, at least, far too immature to be seriously held to the severe task before them during the first years in school. From this it follows, that, having but a definite and limited period of stay in school, it is inevitable that they should fail to reach a point of fair attainment, and, in just so much, they lower the standard of average accomplishment. In justice, I ought to add to the above remark that in the New York Institution the pupil who enters school below the age of twelve has the opportunity of remaining as long after reaching that age as if he had then entered, and, of course, this argument does not apply with the same force to that institution.

I come now to consider another powerful, perhaps the most potent, influence in producing the apparent retrogression that has been observed, and it is the one to which I should look for an explanation of any difference in attainment at different institutions, for which I could not readily account by any recognizable difference in methods or efficiency. Theoretically, we all know that, as a nation, we have always been, more or less, the creature of emigration. It was not, however, until some time later than the establishment of our first institutions that this emigration began to assume the character and gigantic proportions it has since acquired. Previously, our accessions, from this source, were largely of a fair class of Spanish, French, Scotch and English people, all more or less intellectual in character and antecedents. Parentage tells as well in mental as in physical character, and, taken as a whole, the children of such people will evince a higher average of mental capability, than will those of a class whose heritage, for generations, has been oppression, ignorance, poverty and degradation. Therefore, when I say that these later years have poured upon our shores millions upon millions of the ignorant, oppressed and degraded, I merely give expression, indirectly, to the fact, patent as the sun to all who have studied the progress of our insti-

tutions, that this rush of whole peoples to our shores has largely added to the number of our pupils whose antecedents and inheritance doom them to lower the average standard, in exact proportion as they augment the number.

It is from among this class of people that, owing to want, ignorance of the laws of life, vice and crime, we receive the largest proportional number of unfortunates. New York, as the grand objective point of this exodus of the poor of the old world to our shores, comes in for the lion's share of the evil fruit of poverty, vice and crime, as no one need doubt after seeing the waifs from her great cities to be found in her Institution. New England, on the contrary, has never much attracted these inpouring hosts, and, as a consequence, I should not be surprised if it were found to be true, that the average point of attainment in the American Asylum was higher than that of the New York Institution. Not that pupils in the New York Institution, and, in absolute number, as many of them, do not reach as high a point, as in the New England Institution, but that the number who reach this point in the latter is probably greater in proportion to the whole number of pupils.

Another element to be considered has its foundation in the language of signs, or rather in its use. Its bearing upon our subject has not, so far as I have noticed, received the attention which to me it seems to deserve. After the sign-language has served the purpose for which we employ it, its continued use retards, if it does not render impossible, the more complete mastery of the common language which it is one of our chief purposes to have the deaf-mute acquire. In the earlier years of deaf-mute education, when educated mutes were few and widely separated, they found little opportunity to continue the use of the sign-language after leaving school, and, being compelled to depend upon common language either in writing or by

the finger-alphabet, they necessarily became more familiar with it; just as other people sooner and more perfectly acquire any foreign language by living among those who use it, and where they themselves are obliged to use it as the medium of business and social enjoyment. At the present time, educated deaf-mutes are found in almost every neighborhood, and so near each other that they have abundant temptation and opportunity to retain the sign-language in conversation among themselves, and develop a sort of clannishness that renders their continued improvement in language, after leaving school, in a large number of cases, nearly impossible. It is to be desired, indeed, that they should have the source of pleasure and social enjoyment among themselves which is furnished by the language of signs, and we can only regret its unfavorable effect, in preventing a more perfect acquisition of the common language of the people among whom they live. The bearing of this view of the use of the sign-language upon our subject, lies in the fact that the younger members of our profession have had little or no opportunity for making comparison between the old and new, other than the one they are very apt to institute between the earlier graduates, now advanced in age or middle life, under circumstances so much more favorable to the retention and increase of their knowledge of written language, and the later graduates, who, if socially more pleasantly situated, have not been under the same necessity of depending so exclusively upon written language for social intercourse. Then, too, few, except the most intellectually gifted of the earlier graduates, come into the wide notice which naturally still commands our attention, while the dull ones never come into our field of view. Besides, most people at first doubted the possibility of doing anything for the deaf and dumb, yet, when the undertaking justified itself by a large measure of success, these same skeptics at once declared it was miraculous, and exaggerated

the success actually attained. It became a wonder of the day, extraordinary attention was called to the educated mutes, and every one was anxious to prove for himself that deaf-mutes could really be brought to understand and use written language and thus communicate with their fellow-men. Now, the novelty and wonder of the thing have been worn off by the very commonness of the achievement, and a deaf-mute has ceased to be an object of especial notice, except in a few out-of-the-way regions, where the chance is that one of average capacity is better educated than the majority of the people who surround him. As a consequence, although the actual difficulties of the task to which teachers of the deaf and dumb address themselves, are little better understood now than they were fifty years ago, people, from skepticism as to the possibility of educating the deaf and dumb at all, have come to look for more than it is reasonable to expect of persons laboring under such disadvantages.

There are, doubtless, other causes which have exerted more or less influence in producing the apparent lowering of the standard of average attainment in our institutions, which has given occasion, to superficial observers, to impute less of efficiency, if not of zeal, in our profession, now, than was shown by our predecessors. But these remarks have already, perhaps, been unreasonably extended, especially where I claim no particular originality or value for them.

That the fullest possible measure of success, in accomplishing the grand object of our labors, has been attained, I should be sorry to believe, for my aspiration is, as yet, vastly beyond my accomplishment. Let any one convince me that there is a better way by which I may come nearer my ideal, and I shall gladly follow his lead and regard him as a benefactor.

THE DEAF AND DUMB IN PARLIAMENT.

BY RICHARD ELLIOTT, M. A., LONDON, ENGLAND.

Having heard that the subject of the education of the deaf and dumb was to be brought under the consideration of the House of Commons, I was curious to hear the expression of the wisdom of that most renowned of legislative assemblies on a subject of so much interest to me. But I was not sure of having my curiosity gratified; for one cannot reckon with certainty upon penetrating into the interior of the chamber where that wisdom finds utterance, during those deliberations which are of so much importance to that large section of mankind, the English-speaking and English-ruled portion of the human race. For the "strangers' seats" will accommodate only about 150 persons, and over a space sufficient to accommodate about 100, the 650 members of the House have control. Happily, however, for the curious, in a general way the people are so well satisfied with reading in the daily papers what has been said and done, and have perhaps so little political enthusiasm, that, on ordinary occasions, a member's order will carry one in during a debate at once; and the meagre accommodation for "strangers" is, consequently, not a grievance at which that great body of "strangers," the British nation, often grumbles. But members' orders are not very easy to come by, and even when one happens to have the needful slip of paper, there is not a certainty of admission. It is quite possible that on the chosen occasion, considerably over one hundred people may be like-minded in regard to hearing a debate, and then one has to run the risk of being sent back, through losing the ballot which takes place at such times.

In the present case, the influence of a friend broke down all barriers, and enabled me to dispense with members and their orders. Having gone through the

requisite formalities, and obtained the needful permit, I was ushered by a portly policeman into the presence of the august assembly. This was on the 8th of March, in last year. Proper feelings of respect and veneration, I trust, reigned within me upon this my first visit to the House of Commons. But it soon became as apparent to me as it has, I suppose, to most other people who have found themselves in a similar position, that the business of making, altering, or amending laws, if judged of by the manner and appearance of those potent individuals who make, alter, or maintain the said laws, must be a very pleasant and agreeable process, calling, apparently, for no great intellectual powers, and mainly requiring in these individuals patience and forbearance, as one speaker after another gets up to say what he knows beforehand will have little or no influence upon his hearers' convictions. On this particular occasion, when as a "stranger" I entered the "House" in the hope that the claims of the class I labor for might receive some such notice from the legislature as would interest people in their behalf, I was certainly somewhat disappointed at the apparent air of inattention with which members seemed to treat what was going on, and it occurred to me that it was very possible the subject in which I was interested might be received with the same seeming listlessness and indifference. It is true that a specially dry speaker was then on his legs; still, his arguments were sound and his speech quite to the point. The whispering seemed universal among the members, but to my unpractised eye the demeanor of the Speaker exhibited the greatest degree of indifference. To him all remarks were addressed; and when some knock-down blow had been delivered at an opponent's argument, or some telling point had been driven home with irresistible force, he would be, either, as it appeared to me from my elevated and distant seat in the gallery, quietly asleep, or talking to some other member, apparently utterly unconcerned, and ignorant of

what was said. Yet, notwithstanding all this, the stillness which prevailed was noticeable, and everything that was said could have been followed and studied. But it seemed to me that no one wished or cared to notice what was going on, except those who intended to follow in the debate. The hopes I had cherished that the claims of the deaf and dumb would obtain at least a hearing, and would be brought with some degree of prominence before the country, began to grow faint as I observed this apparent disposition of the House, which was then in committee on the "Irish Land Bill."

I should add that the impressions here stated, and which probably were very erroneous, were those I formed during my first visit to any deliberative assembly. I found it very difficult to persuade myself that under this appearance of listlessness, there existed a deep undercurrent of devotion to the country's service, in the minds of those gentlemen, as they gossiped and lounged on their very comfortable benches.

After the dull but clever speaker whom I have mentioned, came another, a more eloquent man, but whose utterances were far less to the point than those of the one who had just sat down, and whose speech, in matter and argument, bore no comparison to his. But the House listened to this speaker, for he amused it, and the whispering and gossiping stopped while he spoke. After he had finished there was a rush of members out of the House, and the process of legislating went on in the same humdrum style which had so painfully impressed me on my entrance. But I must not linger over my personal impressions. After keeping my seat for some hours, there seemed not the remotest probability that the "orders of the day," in so far as they related to the "Bill for the Education of the Blind, etc.," would be carried out. So I took my departure, less sanguine of having my hopes fulfilled than when I entered, and with less reverential feelings towards those wise and talented individuals who write "M. P." after

their names, than I had hitherto had. For, whereas, in my simplicity, I had thought that they must necessarily be superior in every way to ordinary people, I now came to the conclusion that most ordinary educated people would make fair average M. P's.

During some of the intervals of the debate, I had had leisure to examine the details of the bill which was to be brought forward in the interests of the deaf and dumb by Mr. Wheelhouse, M. P. for Leeds. I have not this paper now before me, and I give what follows from memory. I was entirely disappointed in it. The "Education of the Blind, etc. Bill," as it was called, was not very easy of comprehension in its various clauses, nor were its enactments in regard to compulsory attendance at school very decided. The whole machinery of education, in so far as regarded the necessary provision, and the steps to be taken to bring children within its scope, was to be worked by the poor-law authorities. The guardians of the poor could be compelled by poor parents to provide for the education of blind or deaf and dumb children, and the guardians could do something in the compulsory way with parents who had such children. Then a sum of not more than £24 per annum was proposed to be paid for each child. An inspector also was to be maintained for the schools. It struck me that there was little advance upon present arrangements, for boards of guardians can now send any such children whom they may have in their workhouses to suitable educational institutions; and, further, that in the proposed scheme there was no security for the quality of the proposed education, no intelligent appreciation of the needs and requirements of the classes it was sought to benefit, nor any provision for the complete control of the several schools, in so far as they might carry out the provisions of the bill, by competent authorities, such as exist in other departments of labor supported and governed by the state.

In the newspapers of the next day I found that the subject had not come on after my leaving, but that it was down for the next afternoon. Accordingly, by the same means as the day before, I entered the House again. It was Wednesday; when the hours of meeting are between 12 M., and 6 P.M. The first debate was on the "Scotch Church-Rate Bill." This was ominous for the "Education of the Blind, etc. Bill;" for religious questions are discussed at such length, and excite such interest, that a brief debate, which was the best chance of a hearing the latter bill had, was not to be expected. I was not much surprised, therefore, that but this one subject was got through. However, just before six, one of the wiggled officials of the House, in an almost inaudible voice, among other matters, read the title of this particular bill, and said something in reference to it; but what had taken place, whether it was passed unopposed, or withdrawn, or its consideration adjourned, it was impossible for me to say, nor did reference to the newspapers of the next day help to an understanding of the, to me, mysterious formality.

It was some time before the "Education of the Blind, etc. Bill" again appeared in the "orders of the day." On three or four occasions when it secured a place there, it was in such a hopeless position for being brought forward that I thought it would be useless to attend. At length on Wednesday, May 4th, as it occupied a place in the orders which seemed to give a reasonable probability of its coming on, I determined to go for the third time. On this particular occasion, the matter which came on first was one of immense importance to the ladies, the "Women's Disabilities Bill," and they showed their interest in the question by filling the grated and almost invisible hiding-place, in which the House of Commons places the lady-auditors of its proceedings. The debate and division which followed, and which unexpectedly gave the ladies what they wanted, was interesting and amusing, but made me

apprehensive lest I should have come again on a fruitless errand. This apprehension was increased when I observed the exodus of members, which followed the announcement of the numbers of the division, and which left only a sprinkling, mostly of second and third rate members, in the house. However, after a short discussion on another bill, the "Education of the Blind, etc. Bill" began the second stage of its short existence, by Mr. Wheelhouse, its author, moving that it might be read a second time. On such an occasion and with such a subject as the present, the member undertaking this duty might reasonably have been expected to endeavor to show the necessity of the measure he proposed, its probable good results if carried out, and the inadequacy of present means for the satisfactory performance of the necessary work. But Mr. Wheelhouse attempted nothing of this. His speech was a mere reiteration of the several clauses of the bill, and the only word of recommendation beyond, addressed to the House, was couched in some such phrase as the following: "I do earnestly ask the House to pass this bill." The gentleman doubtless had facts and figures to bring forward; possibly he intended to use them at a later stage of the discussion, but he certainly made no use of them at a time, when, in my humble opinion, they were necessary to gain attention to the measure. I could not help feeling much disappointed at the way in which the claims of the deaf and dumb were advocated.

After so unhappy a beginning, I was not surprised to see an honorable gentleman, sitting at a very short distance from the mover of the second reading, rise, and move that the bill be read that day six months, that is rejected. This gentleman, Mr. Assheton, did not object to the education of the blind, but only to the honorable member's bill. He thought that the existing provisions of the poor law were sufficient for all the needs of the case. This bill only included the blind, deaf and dumb. Why not include the lame, the deformed, and idiotic, who should, equally with the *three*

classes, (according to the honorable gentleman), be the objects of the care of the state in the matter of their education. This gentleman had evidently paid some attention to the subject, but his speech showed plainly that he had no practical acquaintance with the deaf and dumb, and every word of sympathy he expressed was given to the blind. A Scotch member followed and endeavored to prove how much less the deaf dumb were to be pitied than the blind. He did not oppose the bill, but in the whole course of his speech had hardly a word to say in favor of extending its proposed benefits to those included in the "etc." of the bill. Then came another member who spoke in praise of an existing institution for the blind, and contrasted the small average sum per head there paid, through extremely economical management, with the large sum it was now proposed to give. Then arose an Irish member, the gist of whose loud rambling speech was, "Why was not the operation of the bill to be extended to Ireland? Why should not the poor Irish equally participate in its benefits?" Another member "opposed it with regret. Those who came within its scope, unless they were paupers, should not properly be considered as coming within the sphere of action of the poor-law." Finally Mr. A. Peel, on behalf of the government, got up, and attacked the whole measure. "Where were the honorable gentleman's facts in support of what he had brought forward? It was true that expensive appliances were necessary for the education of deaf, dumb, and blind children, (three classes again), but the already overburdened rate-payers ought not to be called upon to provide them. The effect of the provisions of the bill would be to pauperize the parents." Various other objections were stated, some of weight, some frivolous, but all betraying the fact that the speaker knew or thought little or nothing of the special requirements of the "etc." of the bill. More, perhaps, would have followed, had not he suddenly, in the full

current of his speech and with no apparent reason, stopped and sat down. This, at first, to me, inexplicable proceeding was explained by the fact that it was a quarter to six o'clock, at which time on Wednesday all debates terminate. From that day to the present I have heard nothing of the fate of the bill, and have come to the conclusion that it was strangled by the opposition of the government. A short condensed account of the debate appeared in next day's papers, but, so far as I know, not one, notwithstanding the dullness of the time in political and social matters in which it took place, thought the subject of sufficient importance to honor it with any special notice.*

A noticeable fact in the debate was the ignorance in which the gentlemen who spoke seemed to be involved, in regard to the deaf and dumb. All the sympathy they expressed was for the blind. Hardly a word was spoken in favor of the deaf and dumb, and the necessarily special nature of the instruction which must be given to them, was unmentioned and apparently unknown. Without saying a word in disparagement of the claims of the blind to state aid in the matter of education, any one who knows the natural state of the deaf and dumb and of the blind can decide as to the relative importance of education to the two classes in question, and a few figures will at once show whose needs are greatest in this respect among us. At the last census (1861) the number of blind persons enumerated in England and Wales between the ages of 5 and 15 years was 1,370, and the accommodation for pupils in existing institutions was given as 933. The deaf and dumb at the same time and between the same ages numbered 3,556, and there was accommodation in institutions for 991 pupils.

The failure of this well-meant but crude and unsatisfactory proposal to benefit the deaf and dumb, was

* Since writing the above, I have seen a notice in the papers that Mr. Wheelhouse intends to bring the subject on again this session.

no doubt due, in some measure, to the way in which it was introduced, and to the objectionable nature of the means by which it was sought to be carried out. Further, to join the blind and the deaf and dumb in one category of benefit in the matter of education, can hardly be considered as wise, for their needs and requirements differ so widely. Such a union also tends to confuse the minds of those who have not a clear idea of the nature and consequence of the deprivations, respectively, of sight and hearing, and the people in this case are in a vast majority. A strong appeal, by one who thoroughly knew the wants of the deaf and dumb, and could speak with authority on their behalf, would, I think, be favorably received by Parliament; but such an appeal, to be successful, must be made by one to whom the House listens with respect and whose position and opinions carry some weight. Failing this, the new organization on the subject of National Education may, in time, work some change for the benefit of the deaf and dumb. We can only await the course of events, and hope that they may be so guided by Divine Providence as to result in the amelioration of the condition of those for whom, at the present time, so much remains to be done in this country.

[We learn from a copy of the *London Standard*, sent us by Mr. Elliott, that Mr. Wheelhouse introduced a similar bill for the education of the blind and the deaf and dumb, this year, and that on the eighth of March last he moved its second reading. The motion was opposed by a number of gentlemen, and supported by no one except its mover. It was finally lost. A few days afterwards Mr. Wheelhouse asked the Vice President of the Council on Education "if it were not possible, either by legislation, by means of the revised code, by pecuniary grant, or by some other method, for the government to provide for and secure the education, generally, of blind and deaf-mute children; or whether her Majesty's present government

proposed, notwithstanding the recent Education Act, to leave all children so afflicted, save those of the pauper class, wholly dependent upon family funds, or the efforts and resources of private and institutional charity alone, for their education." Mr. Forster replied that "the only answer he could give was, the government did not see its way to any proposal on the subject. However much he might regret that it was not in the power of the department to undertake the treatment of such unfortunate children, he saw no way of interference except in the case of such as were paupers, who would fall under the care of the 'poor-law board.'"—It would appear, therefore, that Mr. Elliott's forebodings were well-grounded, and that at the present time, which seemed so favorable, no general provision is to be made for the education of the deaf and dumb of Great Britain. We are very sorry. ED. ANNALS.]

THE SEMI-CENTENNIAL CELEBRATION OF THE PENNSYLVANIA INSTITUTION FOR THE DEAF AND DUMB.

BY M. L. BROCK, M. A., PHILADELPHIA.

Fifty years ago the Pennsylvania Institution for the Deaf and Dumb was wedded by legislative enactment to the cause of philanthropy. The fruit of this union has been abundant. Nearly one thousand and four hundred deaf-mutes have here received the inestimable benefit of a good education. Certainly a very respectable and interesting family. Most of the children seem to be doing well. We hear of them as successful farmers on the prairies west of the Mississippi. Many hold positions as faithful and efficient instructors, in this and other institutions. One stands high among American artists, and has in a very able manner committed to canvas the features of the noble founders of deaf-mute instruction in the United States. Another has taken holy orders, and in the city of Bal-

timore breaks the bread of life to his little flock of silent worshipers. And still another is engraver for one of the leading pictorial publications of New York, and is thought worthy to preside over the deliberations of the deaf-mute association of that city. We find them scattered in every direction, and engaged in almost every branch of industry. They work alike in the fields and coal-mines of Pennsylvania, the gardens of New Jersey and the machine-shops of Philadelphia. All are self-supporting; a large majority are respectable citizens, while many are ornaments to the society in which they move.

On the eighth day of February, 1871, over three hundred of these children came together to celebrate the golden wedding of their Alma Mater.

The time for making apologies for these benevolent institutions is past. But were arguments in favor of their establishment still needed, none stronger could be found than such as were presented by the ingathering of these former pupils to their old home. It was a joyful occasion. It was no less instructive than joyful. It served to gladden the hearts of those philanthropic men and women who have here labored so long and earnestly in behalf of unfortunate humanity. Some of them have spent almost a lifetime in this work. Zealously, though quietly, they have toiled on, seeking little of reward, save that the blessing of God might crown their efforts with success. Here, then, they saw the fruits of their labor, and had every reason to be satisfied. It also served to encourage those of us who have more recently entered this part of the Master's vineyard. It gave us broader views of the field in which we are to work, and grander conceptions of the results which are to be achieved.

But more especially was it a season of joy to the deaf-mutes themselves. They came thronging from all parts of the country. From the Atlantic coast and from beyond the mountains, from Maryland and New York,

from New Jersey and Delaware, from Virginia and Pennsylvania, they came to visit their old home, and mingle in the society of their old companions. Class-mates, who had not met for over forty years, again grasped each other by the hand, and in the silent but expressive language of signs, talked of the times long gone by.

Standing in the hall of the old institution, and watching the crowd surging with friendly emulation to greet each fresh arrival; then looking into the reception-room, where hang the portraits of Gallaudet, Clerc and Hutton, one might be pardoned for suspecting the presence of unseen spectators. Two of these good men, if not themselves present in spirit, had worthy representatives in their sons; while the third was no less ably represented by his former co-laborer, and now efficient successor. To the new principal, Mr. Foster, the occasion was a trying one. It was a grand inaugural, and, at the same time, a severe test of administrative ability. That he was fully equal to the task, was demonstrated beyond a doubt. The good order and harmony that pervaded the assembly throughout the day, were the subject of constant remark. Yet the guiding hand was put forth in a manner so quiet and unobtrusive that its presence was hardly suspected.

Drs. Gallaudet and Clerc improved the opportunity as a fitting one in which to impart religious instruction to this interesting class of persons, who, on account of their infirmity, are generally so sadly neglected by ministers and churches. At twelve o'clock a special service was held at St. Stephen's Episcopal church. Dr. Clerc, who is pastor of the deaf-mute mission, read the morning service, which was interpreted by Dr. Gallaudet. The Rev. Dr. Rudder, rector of the church, then made a very interesting address; taking for his subject that portion of the prophecy of Isaiah which refers to the millennium, and in which mention is made of the unstopping of the ears of the deaf, and the opening

of the eyes of the blind. This passage, he said, related to the coming of Christ's kingdom upon earth. When Christ came he performed the miracles here mentioned. The lame did walk, the blind were made to see and the deaf to hear. And though these wonderful works have ceased, they yet find their parallel in the recovery of sight by the blind, and speech by the deaf and dumb, under instruction such as they now receive. For this instruction the unfortunate and afflicted are indebted to the influence of the Christian religion. And this places them under obligation to live holy lives, and to use their newly created powers to the honor of God, and for the welfare of their fellow-men. The speaker especially urged them to bear the evils of this life with patience, and to cultivate a spirit of thankfulness for what has been done for them by the Saviour of the world.

His sermon was translated into signs by Dr. Gallaudet.

At two o'clock the company assembled in the lecture-room of the Rev. Dr. Wylie's church, on Broad Street, opposite the institution. Here the exercises were of the most interesting character. Mr. T. J. Trist, one of the teachers, and president of the "Deaf-Mute Literary Association" of Philadelphia, presided. He delivered a short address, in which he extended a hearty welcome to the returning graduates, and spoke in very feeling terms of the recent sad changes which had taken place in their old home. No garbled report will do justice to the production, and so it is here presented, transcribed from his own manuscript.

“LADIES and GENTLEMEN:—Through the partiality of my fellow members of the Literary Association of the Philadelphia Deaf-Mute Mission, it has become my privilege, in their name to welcome you to this meeting in commemoration of the semi-centennial birthday of our beloved Alma Mater, the Pennsylvania Institution for the Deaf and Dumb. This day rounds

off a full half-century since she entered into existence as an incorporated institution, under the fostering care of this noble State, so justly proud of the distinction awarded her as the 'key-stone' of our Federal arch.

"In point of age, this stands as the third establishment of the kind, to which the philanthropy of our country has given birth; her two older sisters being daughters of Connecticut and New York. Our deaf-mute brethren, graduates of those two institutions, having set us a good example, the society, of which I have the honor to be the organ on this occasion, judged it due to the sentiments of gratitude and affection cherished by ourselves for our parent, that a like manifestation of filial feelings should take place in regard to her. Towards the accomplishment of this most natural wish, we have been encouraged by our friends, the board of directors, and especially by the esteemed principal of the institution, its amiable matron and worthy steward. By their good offices we have been greatly aided in overcoming the many obstacles which stood in our way. Thus our filial wish ripened into this meeting of so many of us here assembled. And for your attendance the originators of the project feel all the more thankful, since the inclemency of the season has doubtless made it, for many who have accomplished the journey, a sacrifice of personal convenience and comfort.

"The chapel of the institution, had it been spacious enough to afford the requisite room, would have been the most fitting place of reception on this occasion. But owing to its contracted dimensions, we have been obliged to avail ourselves of the liberal courtesy of the board of managers of this church, which is indeed a suitable place; standing, as it does, under the very shadow of that venerable Doric portico, which is photographed on memory's tablets in every one of us. In the days of our childhood, so long gone by, it constituted the imposing, and, I may say, awe-inspiring portal to the unknown benefits provided for us within: blessings that

we have since come to know ourselves indebted for, primarily, to the philanthropic devotion of those illustrious benefactors of our class, De l' Epée, Sicard, Gallaudet and Clerc; but more directly to their successors: men, upon whose shoulders the sacred mantle descended, and who proved themselves worthy to wear it.

"Among those worthy successors was one whose memory will ever be specially and most warmly cherished by those of my audience here educated, as that of an old personal friend; endeared to us all by the unvarying gentleness and affectionate kindness with which his authority was exercised for our benefit; and who in all things stood before us as the model Christian gentleman. His old pupils well know how cordial would have been his greeting to each one of them, on this occasion, as his countenance lighted up with the joy of recognition. But his graceful form is no more to meet your eyes. He has been called from the earthly labors, to which, as we all can truly testify, he was so assiduously devoted. In treading again, as we shall presently do together, those old halls where the light of knowledge and religion first dawned upon so many till then benighted minds, every object there, once so familiar, but now almost forgotten, will, upon being recognized as old acquaintances, serve to summon up a recollection of the benevolent face of the headmaster, who, when those objects were gazed upon by you for the first time, was observant of the curiosity which they awakened, and took pains to turn its inquisitiveness to good account, by those patient explanations which contributed so largely to the development of your faculties.

"And now renewing, as I do with all possible cordiality, the welcome which it was my appointed duty to give, I will gladly cease to encroach upon the time allotted for the enjoyments, of which the occasion is, I trust, to prove fruitful for all who honor it with their attendance."

This address was delivered in signs by Mr. Trist, and the ideas conveyed in spoken language by Dr. Gallaudet.

The great event of the day was the Anniversary Oration. It was pronounced, in most eloquent signs, by John Carlin, M. A., of New York. He was one of the first pupils admitted to the school, and is now well known to the deaf-mute community as one of the most talented and accomplished of their number. His address fully met the expectation of his friends. It was an able production, ably delivered; worthy the occasion and the man.*

At the close of the address, the speaker announced that he had, with great pleasure, just learned that the reformatory measures so earnestly contended for, were on the direct road to final accomplishment; the directors having taken the initiatory steps towards the removal of the institution to the country, and also having agreed to ask the legislature for two additional years to the term of instruction allotted to State pupils. He could not do less than congratulate the board upon the wisdom displayed by this course of action, and express his convictions that under such able management the present prosperity and usefulness of the institution would long continue.

Dr. Gallaudet very kindly translated the signs of the several deaf-mute speakers for the benefit of the hearing and speaking portion of the audience.

After Mr. Carlin, Mr. Pyatt, one of the teachers, made a short address, in which he spoke of the characters and labors of the different men who had occupied the position of principal of the institution. In a very touching manner he recognized the debt

*We regret that want of space compels us to omit Mr. Carlin's oration, which accompanies Mr. Brock's report of the exercises. Its leading topics are a sketch of the history of the Pennsylvania Institution, with which are interwoven some of Mr. Carlin's own reminiscences of the time when he was a pupil; and a forcible presentation of arguments in favor of removing the institution from the city to the country, and of extending the term of instruction from six years to eight or more, with an additional time for a high class.—ED. ANNALS.

of gratitude owed by the deaf and dumb to these warm-hearted and energetic philanthropists. He especially referred to the eminent services of Lewis Weld, and his remarks elicited a warm response from the older graduates who had been under the training of that distinguished instructor. The speaker made a proposition, which met unanimous approval, that a portrait of Mr. Weld be painted by Mr. Carlin, and presented by the former pupils to the institution.

Mr. Pyatt was followed by another deaf-mute orator, Mr. Steenrod, of Wheeling, Virginia. His speech was literally eloquence embodied in action. He is by no means a small man, and evidently possesses a soul which is no disgrace to his physical proportions. He had not seen the old institution for forty-one years. His mind was full of memories and his heart overflowing with emotions. Never was the power of the sign-language, to express both ideas and feelings, better demonstrated.

At the earnest request of many of the audience, the Rev. Dr. Wylie made a few remarks. He congratulated the company upon the happiness which this event in the history of their Alma Mater afforded; and also upon the great privileges which they, as a class, enjoyed, in consequence of the education which they had received. Being personally acquainted with many of the officers and instructors of the institution, he was not at all surprised at the results here displayed. They were only what he would expect from the character and ability of such persons. Especially could he testify to the Christian spirit and noble example of the oldest speaking teacher in the school, Mr. Benjamin B. McKinley, who has been for years, and still is, a faithful member of his church.

In the evening the company, to the number of three hundred, consisting of deaf-mutes, their friends and invited guests, assembled in the halls of the institution, and partook of a bountiful repast, prepared under the

care of Miss Kirby, the efficient and accommodating matron of that well-regulated and neatly kept establishment. No more need be said of the management of this part of the entertainment, than that everything was just as it should be. The feast was artistic and abundant, the delight and admiration of all present.

Many of the directors added both to the dignity and pleasure of the occasion by their presence. Certainly they had no reason to regret the labor and care which they have bestowed upon the institution. Mr James J. Barclay, who for more than thirty years has held the position of secretary of the board, though laboring under a severe indisposition, could not resist the impulses of a generous nature to increase the happiness of others, by meeting and mingling with the former pupils. Mr. Fox, Mayor of the city, also contributed, by his presence, the company of an agreeable gentleman, and the assurance of good order. Ex-Governor Pollock, Rev. Mr. Jaggard, Dr. Turnbull, and many other eminent men from the city, participated in the festivities of the evening. Dr. Kerr of York, a former teacher, took occasion to renew his knowledge of signs, and to meet many of his old friends.

One deed of benevolence deserves special mention. Owing to the large number present and the expense of preparing the entertainment, it was found impossible to admit the pupils to the supper. But, that there might be no disappointment on an occasion so joyous, Mrs. Richard D. Wood, a member of the "ladies' committee," furnished, from her own private purse, a bountiful supply of oranges and ice-cream for the pupils' tables. For this act her name has been loaded with unspoken, but heart-felt, blessings.

To me, one of the most pleasing features of the evening was to see the grateful feelings with which these people remembered their teachers. Cases were not rare in which their school-days had closed a quarter of a century ago. Time had thinned and

whitened their hair, and the cares of life had plowed deep furrows down their faces; many were themselves the heads of families; but here they were all children again, and the instructor was saluted as a father. Mr. Pettengill was almost constantly surrounded by a crowd of his boys and girls, who with busy fingers related the many incidents of the school-room, and usually closed by soliciting an assistant to memory in the shape of a photograph. He also received several letters in which the writers expressed their regrets at not being able to attend the anniversary exercises, and still deeper sorrow at not being permitted to meet himself. They, too, requested pictures. But it was very evident that, while these little attentions tended to lighten his pocket, they performed the same pleasing office for his heart. Indeed, he had no occasion to complain of his share of the feast; for he received a bountiful supply of the richest rewards in store for the faithful teacher.

Later in the evening the company repaired to the boys' sitting-room, and witnessed a pleasing exhibition of a number of tableaux and plays. The most important were "Mrs. Jarley's Wax-figures," arranged for the occasion by Mr. Trist. The characters were nearly all original, and intended not only to amuse but to instruct. "Napolcon the Little" made a very insignificant appearance, as he sat on his *Sedan* chair in front of Charlemagne; representing the first and the last of a great empire. "The Deaf-Mute Vagabond" was a character not altogether unknown in real life, but the hope is to be cherished that the lesson here taught may tend to decrease the number of such unwelcome spectacles. All the other characters were well-prepared and well-acted. Mr. Trist deserves great credit for his taste and ingenuity in the conception and management of the performance.

About half-past eleven o'clock the exercises came to a close, and the company reluctantly dispersed. The

celebration was over. A day, the return of which few could reasonably expect to witness, had ended. Some took the night trains for home; while many lingered around their old school-rooms and play-grounds for nearly a week.

To me, coming as I do from one of the newer institutions, and with but a few months' experience in this, many of the scenes were both novel and instructive. But gathering up all the facts presented, and divesting them as much as possible of the glittering show of romance, which must to some extent tinge the various exercises of an anniversary occasion, I am compelled to give my unqualified assent to the sentiment expressed in the *Philadelphia Inquirer*, the next morning after the celebration: "We have not a more useful institution in Pennsylvania than this one, and this fact was yesterday fully demonstrated."

The programme, throughout, was a grand success. To the committee of arrangements, Messrs. T. S. Roberts, Jas. J. Stevenson and William Cullingworth, all honor is due, for a faithful and efficient discharge of duty.

Such entertainments cost both effort and money. In raising the latter, the board of directors generously gave all needed assistance. The whole care and labor, however, was assumed by the literary association of the Philadelphia deaf-mute mission. This is a society which takes into its folds the pupils living in the city and vicinity, as they leave the institution; and where, by mutual encouragement and friendly aid, they are led to seek still higher intellectual attainments and more religious knowledge. As it has superintended the semi-centennial celebration of the institution, we may hope that the association and the institution will now go forward together, increasing in power and influence; and that the centennial occasion may find both still vigorous and active agents in the cause of humanity.

THE CLERC MEMORIAL.

BY EDMUND BOOTH, ANAMOSA, IOWA.

The subject of a monument to the memory of Laurent Clerc is now earnestly discussed, and efforts are made to give the discussion a practical result. The tendency of opinion appears almost wholly towards a monument in the Asylum grounds at Hartford and opposite that of Dr. Gallaudet. I have all along had a different view, and I express it now with reluctance, because unwilling, in any way, to seem disposed to repress or contravene the natural feeling of admiration or gratitude which so many exhibit. And yet I think there is a better way. Let us look plainly at some things readily understood.

Who built the pyramids, cut the Sphynx or raised Cleopatra's Needle? There they stand, but by whose orders? And what was the object? We are in the dark, and can only guess. London and Paris have their monuments of Wellington, Nelson, the first Napoleon,* etc., and little is thought of the towering columns. We are more interested in looking at their bronze or marble features in the museums than at the stone or other shafts pointing to the sky. In our own country we find it difficult to collect enough money to build a monument except over a dead hero's grave, and sometimes there. The unfinished Washington monument, in particular, is a monument of our own misdirected and momentary enthusiasm.

Look at the philosophers and heroes of Greece and Rome. Where are their monuments? Arches and gates are named after them, but what impression do such make on the mind of the visitor? There is little sense in a mass or pile of stone, unless on the summit is the head and face of the person in whose honor it was reared. Seats of learning, and students every-

*This was written before the mad of Paris Communists had destroyed the beautiful column and monument of the Place Vendome.—ED. ANNALS.

where, prize, and strive to procure, busts and statues of Socrates, Seneca, Plato, Cicero, Shakspeare, Milton and others, famous as men of letters or teachers of mankind. What do such seats of learning or such students care for a pile of stone labelled after this man, that or the other, unless beneath the pile is the grave of him whose memory it was designed to perpetuate? Shakspeare's grave is visited by thousands of his admirers. But a hundred monuments with his name thereon might be scattered over England and America, and they would be only ridiculous, unless capped by his bust; while this last would be an object of interest and of study to each succeeding generation of growing youth.

If a monument to Mr. Clerc is to be built, I venture to submit, hesitatingly, the question, whether it were not wiser to place it over his grave? A plain, chaste, monument, not gaudy, nor *outré*, nor so extravagant as to throw all others into the shade,—such a monument would be fitting to the place, the occasion and the man. But, better still, I would prefer a statue or bust, to be placed in the library of the Asylum.

Let me put a question: Would not the former pupils, visiting their *Alma Mater*, and past and present pupils of other institutions and their teachers, making calls at the same place, be far more profoundly impressed by the sight of a bust or statue of Gallaudet, Clerc or Weld, than by a hundred shafts rising from the Asylum grounds? How we should once more, and half sadly, delight to view the kindly expressive face of Dr. Gallaudet, the earnest, strong and intelligent features of Mr. Clerc, and the placid but somewhat sternly honest physiognomy of Mr. Weld! These three busts would indeed be a treasure for the study of a century to come. That of Mr. Stone and others might be added as deemed worthy. Is there no deaf-mute artist in the line of sculpture who is able to chisel them out of

marble? Is there no one with the peculiar talent required to model them in plaster, to be transferred afterwards, to the more enduring material?

MR. J. S. HUTTON'S TEXT-BOOKS.

BY THE EDITOR.

Primary Vocabulary and Phrase Book, for the Use of the Pupils of the Institution for the Deaf and Dumb, Halifax, Nova Scotia. By J. Scott Hutton, Principal of the Institution. Halifax: James Bowes and Sons. 1861. 16mo. pp. 70.

Deaf-Mutes' Question Book. By the Same Author. 16mo. pp. 140.

Elementary Exercises on the Four Simple Rules of Arithmetic. By the Same Author. Edinburgh: Printed by the Boys at the Deaf and Dumb Institution. 1857. 16mo. pp. 79.

Elementary Arithmetical Exercises, Chiefly on the Provincial Currencies. By the Same Author. Halifax: James Bowes and Sons. 1866. 16mo. pp. 106.

Arithmetical Tables. By the Same Author. 18 mo. pp. 20.

Geography of Nova Scotia, with a Brief Introduction to General Geography. By the Same Author. Halifax: William MacNab. 1869. 18mo. pp. 40.

Elementary Course of Religious Instruction. By the Same Author. Halifax: James Bowes and Sons, 1860. 12mo. pp. 48.

The small and unpretending volumes named above are the works of the able and industrious principal of the Halifax, Nova Scotia, Institution for the Deaf and Dumb. They are all designed for the special use of the deaf and dumb; in fact, as is stated on the title-page of most of them, for the use of the pupils of the

Halifax Institution. Small as they are, they have evidently been prepared with no little labor. The book first named, for instance, contains lists of 1600 nouns, or phrases used as nouns, and 1400 of all the other parts of speech, together with from 800 to 1000 common phrases, making altogether not much less than 4000 expressions. These are chosen with direct reference to the practical wants of the deaf-mute, and are intended for the first two or three years of instruction. While they afford, without other aids, little help in the composition of extended sentences, they supply the pupil with this large number of useful words and phrases, which he can make of immediate service in the every-day affairs of life. The list of common phrases, including many of the idiomatic combinations of words which are apt to perplex even the educated deaf-mute who is perfectly familiar with the rules of syntax, is of peculiar value.

The *Question Book* contains between three and four thousand questions, upon a great variety of subjects, and including all the interrogative forms; beginning with such simple inquiries as, "What is your name?" and "How old are you?", and comprising such as, "How is it that you are deaf and dumb, while others can hear and speak?" "Which do you consider the greatest misfortune—to be deaf and dumb, or to be blind?" There are no answers, any teacher of course being able to supply them in the cases where the pupil is at a loss.

The *Lessons in Arithmetic* are prepared upon a principle, which we believe is a sound one: that the instruction of the deaf and dumb, in all elementary studies, should be made auxiliary to his progress in the acquisition of language, which is the great object aimed at in his education. Mr. Hutton, in the preface to one of the books, well remarks: "It is quite possible, and indeed very common, for deaf and dumb children to be able to work exercises in all the simple rules [of

arithmetic,] without having the power of expressing in words the operations they are performing; but it will be generally allowed that this is a state of things by no means to be encouraged. * * * By adopting this course, [that of furnishing the pupils with language to express all the arithmetical operations,] it is true, their *apparent* progress, for the first year or two, will be less remarkable than it would by pursuing the method referred to; but experience has proved, that the time and labor are *ultimately* more than compensated for, in the greater power the pupils thus acquire over both the language and the principles of arithmetic, as well as in the increased readiness and accuracy in calculation which such a training is certain to produce."

Other principles, too often neglected in text-books, have been observed in the preparation of these Arithmetical Exercises; but—we are glad, for the sake of the teachers and pupils of our own and other lands, to be able to say,—the Exercises themselves are adapted only to the schools of Nova Scotia. The currency of the United States is exceedingly simple, the table of Federal money being the easiest of the "tables of money, weights and measures" that the school-boy has to encounter; the British system, too, if less regular than ours, is readily mastered, and is practically very convenient in the transaction of business, especially in the calculation of interest; but the unfortunate Nova Scotian has to learn not only these two systems, but a third one, made up of these two and those of the various provinces, more complicated than either, having the same designations as the British currency, but with varying values. For instance, there are six different kinds of *pounds*, worth, respectively, in United States money, \$5., \$4., \$4.16, and \$3.33, three of them being of the same value. So with shillings and pence. The difficulty is increased by the fact that to many of these denominations

continually employed, there are no corresponding coins in circulation.

The *Geography*, like the Arithmetical Exercises, is especially adapted to the use of Nova Scotia learners.

The *Course of Religious Instruction* is designed for pupils of less than two years' standing. As it differs in its plan and arrangement from either of the books used in imparting elementary religious instruction in most of the American institutions, we quote from the preface a brief statement of its contents.

"The work is divided into four parts:—

"Part I. treats, in a series of simple sentences, of such conceptions of God and of the Soul, and of such practical duties of morality and religion, as can be conveyed, through the medium of natural signs, to the minds of pupils of ordinary intelligence, during the earlier months of their course. It also embraces a list of the principal Scripture Names, each of which will form a subject for graphic and interesting pantomimic delineation; and by the time the pupil has gone over them all, he will not only have a considerable acquaintance with the leading facts of the Bible History, but will also be prepared to enter with advantage on the study of the Catechism in Part Second. Part First has likewise appended to it a series of questions which may be modified and extended at the discretion of the teacher.

"In Part II. the pupil has the facts, with which he is presumed to have been already familiarized, presented in a different form from that in which they were originally communicated to him. In the first instance his ideas were associated with the natural signs; he will now learn to attach them to the words of the Catechism, and these again will form the basis of various additional exercises.

"Part III. consists of a Rudimentary Catechism, touching on the most important truths of revealed

religion, expressed generally in very simple phraseology. At the same time, it may be remarked that neither in this nor the preceding part has it been deemed necessary *rigidly to adhere to such forms of construction or such expressions, ONLY, as may be supposed to fall within the scope of the pupil's grammatical knowledge, or as he may be able to understand without assistance.* It is believed that a general idea of the import of a sentence or phrase may safely be given, and then the sentence or phrase committed to memory, even when the pupil does not perfectly comprehend the force and relation of its several parts, or is unable to form for himself sentences and phrases of similar construction and application. *Imitation and repetition* (frequently unaccompanied, in the earliest stages of mental development, with any very definite conceptions) seem to constitute the two great principles on which the acquisition of a living language depends. It is in this way precisely that the hearing child acquires a practical acquaintance with its mother tongue. Ideas and phrases are apprehended at first as concrete *wholes*; the exact significance of the several elements entering into their composition, and the nature of their relations to each other, form the subject of subsequent reflection. In the order of nature, *synthesis* precedes *analysis*. For these reasons the Compiler has not confined himself, throughout, to the extreme simplicity of style which characterises the introductory portions of this work.

"The CATECHETICAL is here adopted in preference to the NARRATIVE form, as having been found, in the Compiler's experience, better adapted for elementary religious instruction.

"Part IV. contains questions on the foregoing Catechisms, printed *without* the answers, in order to serve as an exercise for the pupil in the recitation of what he has learned."

We cordially commend these books of Mr. Hutton's to the attention of the teachers of the deaf and dumb.

While some of them are adapted only to the case of Nova Scotia pupils, and none of them, as Mr. Hutton himself would doubtless be the first to declare, meet all the wants of a teacher, they contain much that is valuable in itself, and much that is valuable in the way of suggestion.

MISCELLANEOUS.

BY THE EDITOR.

The National College.—The Rev. Dr. Blaikie, of Scotland, who, with Dr. Arnot, was a delegate last year to the re-union assembly of the two branches of the Presbyterian Church in America, is now publishing in the *Sunday Magazine* a series of papers entitled “America and the Americans,” in which he gives the impressions of his visit to this country. The sixth paper, in the March number of this magazine, is devoted to a description of Howard University and the Columbia Institution for the Deaf and Dumb; the sketch of the collegiate department of the latter institution being quite full and appreciative. “The object,” he says, “is well worthy of American enterprise, affording a very appropriate sphere for energies that seem to find their very element in grappling with difficulties, and whose ambition seems to be to accomplish more than has ever been done hitherto with materials that baffle all ordinary efforts.”—He was impressed by one peculiarity in the compositions of the students, to which we do not recollect that attention has previously been called. After saying that with them “the habit of observing nature seems to have been most assiduously cultivated, and great interest to have been taken in interpreting nature’s symbolical language,” he adds: “But it is touching to notice that, amid a great profusion of allusions

to the natural objects of sight, there is hardly one to the objects of hearing. The sounds of nature are a blank. Such words as 'speech,' and 'tongue,' and 'echo,' may occur, but rather in their metaphorical than in their literal acceptation. * * * There is no allusion to the gentle murmur of the sea-ripple, or the majestic roar of the angry waves—nothing even of the '*poluphloisboio thalasses*.' It is just as well, for, had there been, it would have indicated something like affectation; while the restriction of the illustrations to the objects of sight shows how well the *compensating* sense has been exercised, and how little, in such a case, the other is missed."—The article also contains a brief sketch of the Pittsburgh Day-School.

The Iowa Institution.—The *Iowa State Register* of Dec. 28, 1870, gives an interesting account of a visit to this institution, now established in its new and comfortable quarters at Council Bluffs. We copy the paragraphs which describe the location and exterior appearance of the building.

"Wending, for a mile or two southward from the city, around the base of the huge bluffs, one sees the top of the observatory, but the building itself cannot be seen until he arrives at the top of an impudent bluff, which inserts itself between his vision and the institution, which occupies a position some two miles from the city and just outside the corporation limits. It seems that nature here omitted a few links in the chain of bluffs that stretches in neighborly distance along the 'Big Muddy' from away up in Dakota down into Missouri, thus forming a few hundred acres of as beautiful land as can anywhere be found. The grounds upon which the building is situated are ninety acres in extent, and slope gently to the north. The land was placed in the hands of the State as a gift by the citizens of Council Bluffs. Through this tract flows the

clear water of Mosquito creek; and right here is the reason why the institution was not placed upon a more elevated site. The water would not come to the institution; consequently the institution had to go to the water. As far as height and health are concerned, we call the site a very fair one, the low marshes and swamps mentioned by some of the State exchanges being nowhere visible. As for trees and shrubbery, the place bears and must, of course, continue to bear for a few years, a rather barren aspect. During last season there were raised by the school on this ground 1,200 bushels of potatoes, and corn and vegetables in profusion.

"The style of the building is the 'Italian Romanesque,' which, the Commissioners inform us, 'combines strength, durability, comfort, elegance, taste,' etc. There is a great deal of all the enumerated qualities displayed in the structure, yet all must deem it a misfortune that the legislative appropriations were not large enough to admit of more 'elegance and taste.' There are now only the main building and right wing; the left wing will come with its necessity. The main building is 120x56, and 66 feet, or five stories, high, exclusive of a creditable observatory, while the wing is 100x50. The basement is constructed of stone, and the building above-ground of brick, with stone windows, cornices, door-caps etc., wood being allowed only in the observatory and in window-frames, sashes and doors."

The Michigan Institution.—This institution has recently lost two of its teachers by death—Mr. P. N. Nicoles and Mr. L. D. Pomeroy. Neither of them, however, were actually in the service of the institution at the time of their death, they having withdrawn from it several months previously, on account of failing health. Mr. Nicoles is spoken of as a deaf-mute of remarkable ability. Mr. Pomeroy, a graduate of Hamilton College, was a teacher of much promise.

An Institution in Oregon.—Mr. W. S. Smith, a graduate of the New York Institution, and late a teacher in the California Institution, opened last year a school for the deaf and dumb at Salem, Oregon. He has received a small appropriation from the legislature of the State and has entered upon the work of instruction with several pupils, thus laying the foundation of what will doubtless grow, one of these days, into a flourishing State institution.

The Boston Day-School.—Mr. A. Graham Bell, a son of Mr. A. M. Bell, whose method of teaching "Visible Speech" was mentioned by Mr. Isaac Lewis Peet in the discussion upon articulation at the Indianapolis convention, is now engaged as an instructor in the Boston Day-School. The Hon. Dexter S. King, the founder of this school, writes us that Mr. Bell's success in teaching articulation, according to his father's system, is very great. Mr. King believes that Mr. Bell has the true philosophical foundation for instruction in this department. The Boston school now numbers forty pupils; there are four teachers besides Mr. Bell.

A Day-School in Chicago.—Mr. D. Greenberger, formerly a teacher in the institution in Vienna, Austria, of which Mr. J. Deutsch is the principal, has been engaged for several months in teaching deaf-mutes in Chicago. The Board of Education of that city have provided him for this purpose with a room in one of the public schools. Mr. Deutsch, it is well known, is one of the most eminent and successful of the advocates of instruction by means of articulation, and Mr. Greenberger is his disciple. He informs us that his success in Chicago thus far is wholly satisfactory.

The Ulster Institution.—The *Belfast News-Letter* of Dec. 15, 1870, contains an account of the annual meeting, the day previous, of the "Ulster Society for promoting the Education of the Deaf and Dumb and the Blind." The annual report was read, showing the institution to be in a prosperous condition. During the past year there were 147 pupils, of whom 109 were deaf and dumb. Resolutions were offered, and interesting and eloquent speeches were made by various distinguished gentlemen. The principal of this institution, the Rev. John Kingham, is the author of a series of valuable text-books for the deaf and dumb, on language, geography, English history and the Scriptures. The most striking feature of the history and Scripture lessons, in distinction from other books of similar design, seems to consist in their having, at the bottom of each page, a table of definitions of all the new and difficult words introduced.

The Indianapolis Convention.—The "Proceedings of the Seventh Convention of American Instructors of the Deaf and Dumb, held at the Institution for the Deaf and Dumb, Indianapolis, Indiana, August 24th, 25th and 26th, 1870," making an 8vo. volume of 272 pages, have been published by the Indiana Institution in very creditable style. To all persons interested in the education of the deaf and dumb—both those who attended the convention and those who did not—this record of the proceedings must have great interest and value.

Monument to Laurent Clerc.—It is proposed by the deaf-mutes of America to erect a monument to this distinguished deaf-mute, and several organizations have been formed in different parts of the country for this purpose. The one which seems most comprehensive in its scope is the "Clerc Monument Association," organized last

March, in Washington, D. C. This association is intended to be national in its character; it has nominated officers subject to the approval of future contributors to the fund, and apportioned the several states of the Union into suitable districts for auxiliary organizations. We have not space here to enter into the details of the plan; any one desiring further information can receive it by applying to Mr. J. G. Parkinson, room 95, Patent Office, Washington; or to Mr. J. Burton Hotchkiss, National Deaf-Mute College, Washington. An association previously formed for the same purpose in New England has determined to co-operate with the one in Washington, and has transferred to it the money it had collected. The Washington plan has received approval, subject to various slight modifications, from different parts of the country, and auxiliary organizations have been formed in Ohio, Illinois and Tennessee. The work of collecting subscriptions has begun, and is going on successfully.

The "Fanwood Literary Association," of the New York Institution for the Deaf and Dumb, has also resolved to engage in the erection of a monument to Laurent Clerc, "but for the present it will not be auxiliary to any body already formed or to be formed." It will, however, maintain a correspondence with other organizations, "with the view to forming an American Association." This society has collected over five hundred dollars.

A "Clerc Monument Association" for New York, Northern New Jersey and Canada, was organized at Ithaca, New York, nearly two years ago, and at about the same time one was organized in Philadelphia for Pennsylvania, Southern New Jersey, and Delaware. The Ithaca Association has recently issued a call for a national convention to be held at Albany, N. Y., Aug. 30, 1871. A meeting of deaf-mutes lately held in Boston, resolved to co-operate with the Ithaca Association.

We trust these various associations will all work together harmoniously for the common object which they have in view, and that, whatever plan of organization may be adopted, the result will be the erection of a suitable memorial of some kind in honor of the first deaf-mute teacher of deaf-mutes in America. We publish elsewhere in this number of the *Annals* a communication from Mr. Edmund Booth, a graduate of the American Asylum, now editor of the *Anamosa* (Ia.) *Eureka*, in which he suggests the desirableness of showing respect to the memory of Mr. Clerc by a bust or a statue rather than a monument. We commend his sensible suggestions to the consideration of the friends engaged in this work; the decision, however, as to the precise form and shape which the memorial shall take, may doubtless properly be left to a future time, when the necessary means shall have been collected.

Highly Educated Deaf-Mutes.—We found the following paragraph in the *New York Tribune* of Dec. 24, 1870. It, as we suppose, it refers to the brothers Moore, one of whom was formerly a pupil of the American Asylum, it is partly in error with regard to the elder. He is not dumb, and is not wholly deaf. The statement with regard to the younger brother, we are informed by some of his old associates at Hartford, is correct, and he fully deserves all that is here said of him :

“A correspondent relates a remarkable instance of perseverance and success under unusual deprivation of natural faculties. Two sons of a wealthy American gentleman, both dumb, and one deaf also, were sent to Europe for education, and both have succeeded wonderfully. The elder, who is wholly deaf, passed through the rigid and extended scholastic curriculum of Heidelberg, ‘acquiring ease and elegance in German and French, and a perfect understanding of Greek, Latin and

Hebrew, enabling him to pass an oral examination in those tongues with marked ability, and to receive, at the age of 28, the unusual honor of the degree of Doctor of Philosophy, in addition to the usual degree of Master of Arts. The younger brother, though deprived of speech and hearing, has also achieved an equally remarkable success. He is now engaged in painting the ruins of the Alhambra, in Spain: the work, when finished, is to be placed on exhibition in this city."

A Deaf Legislator.—The *New York Evening Post* of April 25th says that there is in the German parliament a member so deaf that he can hear nothing whatever of the remarks of his fellow-members, but who nevertheless takes an active part in the debates, replying to the attacks of his adversaries with remarkable readiness and effect. He is enabled to understand what is going on by the help of an associate, who sits at his elbow and reduces to writing every word that is spoken in the discussions. The deaf member is the learned historian Heinrich von Treitschke.

A Deaf-Mute Franc-Tireur.—The *Schweizer Bote* of Aarau, Switzerland, says:—"Our town has for months past been visited by extraordinary numbers of fugitives from the French civil population. Consuls and other officials readily speak of Aarau as a good resort for the needy, and accordingly we have a number of necessitous persons to support in our town. Among the hundreds of cases of applications for relief to the secretary of the Aarau Aid Society, a case presented itself the other day, unique in its kind. A deaf and dumb couple from France begged for assistance on their journey to Zurich. The husband, now a civilian, was a few weeks ago in a corps of Franc-Tireurs, consisting of 400 deaf and dumb volunteers, commanded by an officer in the enjoyment of all his senses. Our deaf and dumb friend

received a ball in the left leg, and fell into the hands of the Germans, by whom he was healed and then released. When he returned home he found everything in ruins, and accordingly he resolved to take his wife with him and go to Switzerland. The unhappy couple were assisted by our Aid Society and sent on to Zurich after they had rested for two days and been well taken care of at the Aarau Deaf and Dumb Institute. The deaf and dumb Franc-Tireur's story would hardly have been credited had it not been confirmed by his papers, and the investigations made in the Institute. To what a pitch things must have come in France, when they lead the deaf and dumb to battle!"

Discipline in Schools.—A valuable paper with this title was read by Mr. J. S. Hutton, Principal of the Halifax Institution, at a meeting of the Educational Association of Nova Scotia, upon the 28th of December last. Mr. Hutton, in this paper, treats especially of three systems of school-discipline, "which may perhaps be regarded as involving the operation of all the principles that can be supposed admissible from the nature of the case." These he characterizes as, first, "the Rule of Terror"—under which "the rod, *pur et simple*, is the infallible panacea for every evil;" secondly, "the Rule of Sentimentalism"—which "proceeds on the assumption that *moral force*, and moral force *alone*, should be employed in the government of schools, and that corporal punishment or physical coercion in any form is improper and injurious;" and, thirdly, "the Rule of Reason" which may be "summed up in the words of Solomon, 'The rod and reproof give wisdom.'" It is this last theory which Mr. Hutton advocates, as sanctioned and inculcated both by revelation and by common-sense. The discipline of the school, moreover, he maintains, should be wholly in the hands of the teacher, who should be allowed to administer it in accordance with his own

judgment, untrammelled by the interference of parents, school-boards, or committees. "The teacher is surely entitled to the liberty enjoyed by the humblest artisan, the privilege of doing his own work in his own way."

Murder in the Hull Institution.—The *Hull* (England) *News* of April 1st, contains a detailed account of a horrible murder committed by Charles Sleight, the principal of the Hull Institution for the Deaf and Dumb. The victim was Mrs. Maria Hailstone, a deaf-mute, the housekeeper of the institution. Sleight entered her bed-room early in the morning, as she was beginning to dress, shortly after her husband had left the house to go to his daily work, and cut her throat with a razor, nearly severing the head from the body. Death must have followed almost immediately. He then went to the police-station, and surrendered himself as the murderer, but made no attempt to explain or palliate the act. It seems impossible to explain it except on the ground of insanity. Sleight who had formerly been a teacher in the Brighton institution, and had been in Hull but a few months, had hitherto borne an irreproachable character. He was on the most friendly terms with Mrs. Hailstone and her husband. It does not appear that there was any attempt at other violence to the deceased than that above described. The fact that for a few days previous to the murder he had complained of a trouble in his head, and had been under medical treatment therefor, seems to confirm the probability of his insanity.

Mrs. Hailstone was twenty-two years of age, and had been married for eighteen months to a deaf-mute, a painter by trade. Both were persons of excellent character. The "institution" of which Sleight was principal, is not, we infer from some statements of witnesses at the inquest, a boarding-establishment for deaf and dumb children, but a night-school for deaf-mute adults.

The jury of inquest found a verdict of "wilful murder" against Sleight, and he was indicted to appear at the York assizes for trial.

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A POSSIBLE PLAN FOR AN INSTITUTION FOR
THE DEAF AND DUMB.

BY BENJAMIN TALBOT, M. A. COUNCIL BLUFFS, IOWA.

President Gallaudet's description of the summer residence of the St. Petersburg Institution, in the January number of the *Annals*, calls to mind a question once put to the writer of this paper by a prominent member of the Iowa legislature: Why not build an institution for the deaf and dumb on the cottage plan?

The same query has occurred to others outside of institution walls. A warm friend of the Ohio Institution, (who claimed to be a practical man,) once urged a similar plan quite earnestly in my presence; and found fault with the lamented Mr. Stone, then its superintendent, for the persistency with which he pressed upon the legislature of that State, his plan for building an institution that might have cost \$200,000, when half the money or even less would put up all the buildings needed for the accommodation of four hundred pupils. Little did any of us then think that five years later the State of Ohio would enter upon the erection of so expensive, magnificent and complete a structure as the one that now graces the institution grounds in Columbus.

The question above mentioned would very naturally occur to the men of affairs in Iowa; since the cottage plan is the one followed in the largest of our Soldiers' Orphans' Homes, the one at Davenport; which has, when fullest provided for, 565 children at once, with the necessary officers, teachers, and domestics, making a family (or village) of nearly 650 people.

This Home* for the orphan, or half-orphaned, children of Iowa soldiers, occupies what was once Camp Kinsman; it was granted by Congress after the close of the late war to the "Iowa Soldiers' Orphans' Home Association," and by them transferred to the State of Iowa, when the Home became a State institution. The tract, slightly enlarged by purchase, embraces forty acres, pleasantly situated on high ground a little back from the Mississippi River, some three miles northeast of the business portion of Davenport.

The buildings are mostly arranged around a parallelogram about 800 feet by 600, which was the parade-ground of the camp; and consist chiefly of one-story frame cottages, about 35 feet square, plain even to severity, containing from three to five rooms each; furnished simply but on the whole quite comfortably. These cottages, it will be understood, are the barracks occupied by the soldiers to the camp, made more comfortable and neater by plastering and painting, and divided somewhat more minutely than of old.

They are designed to accommodate each a family of twenty or twenty-five children, under the care of a lady, who with the title of "cottage-manager" is the *mother* of the household; occupying a room in the same cottage, and having the entire charge of the children when out of school; mending and keeping their clothes in order, and attending to their little personal wants both by day and by night. These cottage-managers receive for their

*The writer is under many obligations to Mr. S. W. Pierce, Superintendent of the Home, and to Mrs. M. E. Vanderburgh, formerly one of its cottage-managers, for valuable aid in preparing this sketch.

services \$20 a month, besides board and lodging, washing, fuel and lights.

If any of the children are sick, they are at once removed to a suitable hospital, and placed under the care of a nurse; unless from special attachment to any little one the cottage-manager prefers to keep the child in her own charge.

The children take their meals in a common dining-hall, (the old drill-room for cavalry officers,) under the inspection of the officers and teachers; who are also their waiters, eating at a different time, that they may more efficiently serve the little ones.

All over six years of age attend school for ten months in the year, under six faithful and competent teachers, and are instructed in the ordinary branches of common-school education: being classified in one primary, two secondary, two intermediate, and one grammar department. The teachers receive a compensation of from \$25 to \$35 a month, with the same perquisites as the cottage-managers.

When out of school, the children at the Home will be found engaged in domestic duties, either in their respective cottages, or in some other part of the premises to which they have been detailed; or they will be at play at home or on the campus, or engaged in tending their own little flower-gardens, (attached to their cottage homes,) or perhaps visiting their little neighbors in some of the adjoining cottages. At night they gather around the evening lamp, for amusement or study; retiring at or before 9 o'clock, according to their ages.

Visitors are always pleasantly impressed by these little groups of children at play, as happily as if in their own real homes; as well as by the orderly filing of the children, from different parts of the grounds, towards the dining-hall, at meal-times; and by the gatherings in their neat new chapel for singing or for prayer during the week, and for Sunday-school and worship on the Sabbath.

The domestic arrangements, it will be seen, are partly those of the family, and partly those of an institution or community. There is only one kitchen and one laundry for the whole establishment. Each of these departments has its proper supervisor or overseer, with the requisite number of assistants: and the whole is under the control of an efficient superintendent, whose wife fills the office of matron. The number of *employees* at the date of the last report (November, 1869,) was fifty-five, and the whole number of children then in the Home was 405.

A visit to this Home, especially in the summer-time, suggests most forcibly, (as did Dr. Gallaudet's visit to the St. Petersburg Institution,) the refreshing idea of picnic or camp life. I have never seen or heard of anything like it in this country, except the arrangements at some of the watering-places in Virginia and elsewhere: where many of the summer visitors are accommodated in neat little cottages, similarly arranged around a pleasant square; one side of which is occupied by the grand hotel, for the general parlor and refectory, and the lodging-place of transient guests.

To return to the question in our first paragraph, 'Why not build an institution for the deaf and dumb on this plan? That it has advantages none can doubt; advantages which are seldom or never fully attained in our institutions, and which are considered great *desiderata* by many thoughtful minds both in and out of our profession.

First and foremost, among these, is the nearer approach in daily life to the life of the ordinary family. To a timid sensitive child, that has always been a pet at home, the thought of being turned loose in a mob of boys or a herd of girls, to make one's own way and to fight one's own battles, without the protecting and guiding hand of the father and the tender sympathy and help of the mother, without kiss or caress from parent or brother or sister, is not a little appalling.

Parents, too, perhaps over-anxious and with undue tenderness for their unfortunate children, hesitate to trust them in such a crowd; for fear that, in the multiplicity of cares and the press of business unavoidably connected with a large institution, its supervising officers may not be able—however willing—to devote to their little ones that time and attention which parental fondness demands for them.

It is no great wonder that this tenderness so often over-balances the cooler judgment, and that parents shrink so much from committing their children to the care of strangers, however kind and trusty they may be. It is no wonder that mothers, or fathers even, after visiting our institutions, and seeing with their own eyes all the arrangements made for the bodily comfort of the pupils, and for their mental and moral culture; after hearing from superintendent and matron and teacher, over and over again, as to the pains that are and will be taken to make everything pleasant and profitable and homelike; yet leave their children behind them with many misgivings, and turn away with yearning hearts and with eyes full of tears. It is no wonder that they tell us, from time to time, of sleepless nights and anxious days, that come upon them while their little ones are away from home; and that they often long, even more earnestly than the pupils, for the time when they may have them again under their care.

Neither is it very strange, that in a large institution some pupils may fail to receive that individual attention which they would get at home, and which might be bestowed upon them under the more minute subdivision of labor and care found in the life of the cottage family. The petty troubles and the little wants of children, attention to which is a great burden to the single head of any department in our institutions, might easily find relief in the sympathy and care of the cottage-manager whose business, as well as pleasure, it would be to attend to just these things.

It is claimed for the cottage plan, and not without justice, that it provides better for the many little attentions to personal habits, personal wants, and personal trials, than the institution either does or can. Personal rights may perhaps be better secured, and the weaker be less liable to be wronged or overlooked than in the greater masses of the larger institutions.

This plan also secures a better subdivision and classification of the children in respect to age, deportment, and individual peculiarities of temperament and disposition. A set of unruly boys, or of wayward girls, may be put in a cottage by themselves, under a manager of special tact and ability; or they may be so distributed, judiciously, here and there among the cottages, that their evil influence may be counteracted and overruled, and their bad habits corrected, far more effectually than would be possible in the general mass.

Under shrewd intelligent managers, individual peculiarities may be more easily ascertained, and better provided for, in this *quasi* family life. The timid may be encouraged, the despondent soothed, the bold repressed, the wayward checked, the heedless made more careful, the indolent stimulated into activity, at least as well, and perhaps more efficiently than under any other arrangement.

The development of the individual, it is claimed, may be made to accord more nearly with his personal peculiarities, and the necessities of each particular case may be more completely met, by this minuter partition of the work of supervision. In this way, perhaps, the individuality of the pupil will be less likely to be swallowed up and lost sight of in the mass; he will be more self-made, and less like the product of a machine; and thus self-respect and self-reliance will be better cultivated, and the true aim of his education will be more fully realized.

Interest in home and family affairs may also be more readily kept up, and so family ties may be strengthen-

ed, if the cottage-manager interests herself in these things as she ought. One person can certainly do this more easily for a score than for a hundred, or for five hundred: and, doing it more easily, may do it so much the more effectively.

It is also thought, by some, that the healthfulness of an institution may be promoted by such a breaking up and distribution of its inmates. The Home at Davenport certainly presents a good record in this respect, the health of the children having shown a marked improvement over that enjoyed before its removal from the crowded building in Farmington; with the exception of a single visitation by a contagious disease, a calamity to which any community or family is liable. Yet this record is no more favorable than that presented by the other two Homes in the State, conducted on the other plan, or than that of our deaf and dumb institutions generally.

Perhaps the very arrangement of the cottages, with refectory at a distance, and with school-house and chapel under different roofs, contributes to the healthfulness of all the inmates, by compelling them to a certain amount of out-door life; as well as by securing a freer circulation and a better distribution of fresh out-door air to every apartment occupied.

Another incidental advantage of the cottage system, is, that pupils may be taken, if it is desired, at a younger age than is usual in most of our institutions. With accommodations for lodging and schooling entirely distinct, under managers especially adapted to their tender years, with arrangements for study and play suited to their age and strength, there would be less of interference and clashing with the ordinary routine adapted to the older classes, than is likely to be found wherever the attempt is made to ingraft an infant department on any of our established institutions.

What now, if any, are the disadvantages connected with the cottage plan? The superintendent of the Home

at Davenport declares in a letter to the writer that he finds "no serious disadvantage" in its practical working. In his last printed report he says that he "feels it to be the best possible plan on which, successfully, to conduct an institution where a large number of children or adults are collected together." Yet there are some points at which it is open to objections; at least as an arrangement for the deaf and dumb.

In an economical point of view, it would, probably, not be advisable for any established institution to make such a change. While we ought not to shrink from any reasonable expense, which will contribute materially to the welfare of those under our care, yet a due regard to the interests of our respective States requires us to consider this point.

The expense for heating and lighting such a village must be greater than for the same number of persons in a more compact mass: the labor and inconvenience are certainly greater. Probably, too, there is greater danger of fire, than in a single building with a general heating apparatus, properly constructed; though this may be an open question, in view of the experience of some of our western States, as Ohio and Nebraska.

Again, although the first cost of the buildings might be considerably less on the cottage plan, yet in the long run it would be very likely to entail an increased expense for repairs; from the very multiplicity of buildings, and the greater proportional amount of roof and wall exposed to the weather.

But, when we come to the internal administration of an institution on this plan, we shall find a still greater increase of expense. In this respect the Home at Davenport, which has always been a marvel for economy,* can be no just criterion for an institution of our order.

*Since the 1st of April, 1868, the allowance by the State has been \$10 a month for each pupil; which is made to cover all ordinary expenses, including salaries. Before that time the allowance from the public funds was at the rate of \$100 a year for each pupil, drawn monthly; but the Home then had other resources of a limited amount.

It will be noticed from the above sketch that nearly all the *employes* are ladies. All the cottage-managers, all the teachers, and all the in-door domestics but one, are women. For children of the ages found in the Home this is probably the very best arrangement: but it would hardly be accepted by the managers of our deaf and dumb institutions, as the best for our pupils.

And, even if it should be, we should have to almost double our present working force, if we adopted this form of administration. This would largely increase the expense for salaries, even if we chose most of our helpers from the underpaid sex, with the ideas of compensation now prevalent. And, of course, in the "good time coming," when woman's labor shall be more adequately rewarded, this expense would be still further increased.

Again, it would be very difficult to keep up the working force to the required number. Every change, by resignation or otherwise, entailing the necessity of training new assistants in the use of the sign-language and in the way to meet the peculiarities of the deaf and dumb, would present a continually recurring hindrance to the success of the institution. This obstacle to progress, (the lack of permanence and the frequent changes of officers,) is felt very seriously even now; and if it were doubled for each institution, its weight would be still more oppressive and disastrous. In a speaking community like the Home, changes are not so great an evil; because the new-comer can sooner gain the requisite degree of experience, and so can sooner make good the place of the one who is gone.

The facility of administration is probably greater under our present system, than it would be by the cottage plan. Everything is more immediately under the eye of the head of the institution, if it is administered in the more compact form; though, as claimed above, the supervision may be more minute and complete, if suitable managers are secured, with the other system.

A careful study of the cottage plan, as sketched in these pages, shows that it does not really accomplish all that is claimed for it. Much as its advocates insist on the superior family influence, it is still deficient in this very respect; and the so-called family life is artificial, not natural. We find no families, in ordinary life, of twenty boys or twenty girls, of nearly the same age, under the care of a single parent. Nor would it be advisable, either at the Home or in any of our institutions, to make mixed families, either as to sex or age. Each plan fails, and always will fail, to secure the full fruit and value of the domestic and social life of the well-ordered family. The only question is—which plan comes the nearest to securing the desired ends?

All the special advantages claimed for the cottage plan, we aim of course to secure in our institutions for deaf-mutes, whether large or small; yet it must be confessed that we often come far short of our ideal; and all conscientious thoughtful officers are ready to admit the deficiency. We are not lacking in modesty or in candor, when we assert that this deficiency is not entirely owing to unskillfulness and shortcomings in those having charge of these institutions; but that a part of it, at least, is the outgrowth of the system followed; and will always be found connected with the system of aggregation, however excellent the management.

Whether we should, on the whole, make any material gain by adopting the cottage plan, admits of doubt; yet the subject is worthy of careful consideration by those having the care of deaf-mute institutions, and especially by those projecting new accommodations for their schools.

THE SIGN-LANGUAGE.*

BY REV. J. R. KEEP, M.A., HARTFORD, CONN.

The sign-language, to be appreciated, must be seen. As it is addressed to the eye, it is by the eye alone that it can be fully understood. An hour spent in one of our institutions for the deaf and dumb would do more towards imparting a correct knowledge of it, than the most elaborate essay.

The grand principle which lies at the bottom of signs is resemblance. *Words*, except in a few disputed cases, are entirely arbitrary in their signification. They bear no likeness to the objects or ideas which they represent. But signs, as used by deaf-mutes, are nothing without a resemblance, more or less apparent, to the thing signified. The untaught deaf-mute instinctively seeks some likeness by which to suggest to another mind the object which is in his. He will picture its form, or mark its height, or imitate its motions, or he may do what he sees others do in connection with it. Thus, he snaps his fingers and pats his thigh to signify a dog; he holds imaginary reins in his hands and puts himself into an erect attitude to indicate driving; putting two fingers astride a third, with appropriate motion, he represents horse-back riding. Or he may suggest an object by imitating its effects. Thus, to represent spirits of ammonia he withdraws the cork slowly from an imaginary vial applied to his nose, and throws his head suddenly backwards. So in suggesting an onion, he holds himself at a distance while peeling it, and with many closings and openings of his eyes indicates the distress it occasions. A man is described by putting a hat upon the head and indicating the height of the wearer; a boy by the same sign, with such indication of height as the age may require. A woman is the bonnet-person—contracted for convenience in rapid communication into the mere sign of the string as it comes down

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upon the cheek—with the indication of height as before. Love is represented by placing both hands with strong pressure upon the heart. Joy, by a beaming face, and by patting the hand upon the heart to indicate its rapid beatings. For sorrow, besides the mournful countenance which would indicate it, the closed hand is passed slowly over the heart, to show that it is heavy with pain. Astonishment, fear, hope, despair, desire, anger, pity, disgust, all have their modes of outward manifestation; and it is by giving free play to motions, attitudes, and expressions, such as nature prompts, that they are represented in signs.

It may not be uninteresting to describe some of these. Fear, with blanched countenance, shrinks backward from the place of danger. Boldness, with firm muscle and erect bearing, presses forward. Shame, with a face suffused with crimson, hangs the head. In hatred, the hands are placed upon the heart, and then with open palms some imaginary object is pushed violently away. Anger is represented by the sudden mounting of the blood. Desire extends the hands forward and works the fingers, as if struggling to take hold of the object sought. Hope places the right hand extended far forward, and the other pointing to it and working to reach it as in desire, the eye meanwhile being fixed in earnest gaze on the hand more remote. In pity, the countenance, full of sympathy, looks toward the object of its compassion, and puts out the hand, as if tenderly touching it. Different countries and nations have signs by which they are designated. Thus, Spain is the cloak-country. The Jews are the bearded people. Asia is indicated by the almond-shaped eyes; Greece by the straight nose. The sign for God is made by pointing upward and bowing the head reverently. The pierced hands denote Christ. A prophet is one who sees future events while his eyes are covered, that is, who sees with his mind.

But we are dwelling too long on these individual descriptions. Our purpose was to speak of the *language of signs*, of its structure and general features, and more especially of its relation to the spoken languages of the world. Representing, then, signs by *words*, the only expedient by which we can represent them on paper, we will endeavor to give some idea of the sign-language as it is used by the deaf and dumb. The power and grace of language will, of course, be wholly wanting in such a representation of it. It should be understood also that the words employed to represent signs do not adequately represent them. They can give no idea whatever of the peculiar action or look which constitutes the sign, and but a meagre idea even of its import. With these explanations, we will take the story of the Prodigal Son, and, so far as it is possible to do so, translate it into the sign-language.

Once, man one, sons two. Son younger say, Father property your divide: part my, me give. Father so.—Son each, part his give. Days few after, son younger money all take, country far go, money spend, wine drink, food nice eat. Money by and by gone all. Country everywhere food little: son hungry very. Go seek man any, me hire. Gentleman meet. Gentleman son send field swine feed. Son swine husks eat, see—self husks eat want—cannot—husks him give nobody. Son think, say, Father my, servants many, bread enough, part give away can—I none—starve, die. I decide: Father I go to, say I bad, God disobey, you disobey—name my hereafter *son*, no—I unworthy—You me work give servant like. So son begin go. Father far look: son see, pity, run, meet, embrace. Son Father say, I bad, you disobey, God disobey—name my hereafter *son*, no—I unworthy. But Father servants call, command robe best bring, son put on, ring finger put on, shoes feet put on, calf fat bring, kill. We all eat, merry. Why? Son this my formerly dead, now alive: formerly lost, now found: rejoice.

The first thing to be remarked in the sign-language, judging from this specimen of it, is its very scanty allusion to *time*. Even the present tense, which seems to be used in the narrative, is not so used—it is merely the root of the verb, and was employed because it does not necessarily suggest the idea of time. All actions, while taking place, are, indeed, present, but there is no reference to this in the sign-language. At the commencement of the narrative the time is fixed—"once"—and no further reference is made to it. Let it not be supposed that the sign-language is incapable of expressing time. It can and does express all the tenses whenever circumstances require. But it does not, like verbal language, repeat the intimation of time with every action throughout the narrative.

The next thing observable in the sign-language, as it appears in this illustration of it, is that there are many words in spoken language which are not represented or expressed in signs. There are no conjunctions, for example. The various time connectives, such as *when* and *then*, have no place naturally in the sign-language. Instead of "When I have eaten dinner I will go to the city," or, "After dinner I will go to the city," we say in signs, "Dinner done, I city go."

Thirdly, inversion, or the placing of the object before the action, is, it will be seen, a striking feature of the sign-language. That in this respect it follows the method in which *all* minds conceive of objects and actions, we have no doubt. Take this as an illustration, and, as it seems to us, proof of the point. Suppose I strike a board. I do not strike the vacant air, seeing nothing, and having no idea of anything before me until after I have struck, when suddenly a board rises up to receive the blow. I first *see* the board, I intend to strike it, and with it before my sight, I strike. In exact conformity with this necessary order of nature and of fact, in describing this in signs we say, "I a board strike."

Beautiful, expressive, and truly natural, however, as is this vernacular of the deaf-mute, it yet has not always been sufficiently trusted in, even by his instructors; and we must now present to our readers a very different picture. To the Abbé Sicard, head of the Royal Institution in Paris, these natural signs, with their scanty reference to time, the absence of conjunctions and other connectives, and their inversions, seemed little better than chaos. He regarded the difference in structure between the sign-language and spoken language as so great, that the one could by no possibility be translated into the other without some intermediate language to bridge the gulf. He had also the notion that words could not be made available to the deaf and dumb, except as they were first associated with some sign or physical image.

With these views, he proceeded to construct a new language of signs, the leading features of which were two. First, to find and fix a sign for every word of spoken language; and second, to express or gesticulate the signs thus prepared, in the *order* of spoken language. It is obvious that signs, whatever their character, could not become associated with words, or suggest them, until words had been learned. The first step, therefore, in the process of instruction was to explain by means of natural signs (which the deaf and dumb child having himself invented would of course understand) the meaning of a passage of verbal language. Then each word was taken separately and a sign affixed to it, which was to be learned by the pupil. If the word represented a physical object, the sign would be the same as the natural sign, and would be already understood, provided the object had been seen and was familiar; and in all cases the endeavor was to have the sign convey as strong a suggestion of the meaning of the word as was possible. The third and final step was to gesticulate these signs, thus associated with words, in the exact order in which the words were to stand in a sentence. Then the pupil would write the

very words desired, in the exact order desired. If the previous explanation in natural signs had not been sufficiently full and careful, then he would not understand the passage. The methodical signs did not profess to give him the ideas, except in a very limited degree, but only to show him how to express ideas, or the symbols representing them, according to the order and methods of spoken language. As there were no repetitions of time in narratives in the sign-language, it became necessary to unite with the word-sign for verbs, others to indicate the different tenses of the verb, and so by degrees methodical signs, as they were called, not only comprised signs for every word, but also, with every such sign, a grammatical sign to indicate what part of speech the word was, and, in the case of verbs, still other signs to show their tenses and corresponding inflections. It was a cumbrous and unwieldy vehicle, ready at every step to break down under the weight of its own machinery. Nevertheless, it was industriously taught in all our schools, from the date of the founding of the American Asylum in 1817, down to about the year 1835, when it was abandoned.

A modification of this system, as practiced by the late Mr. Jacobs of Kentucky, still has advocates. Mr. Jacobs professed not to use word-signs, but only to change the *order of natural signs*, so as to make them conform to the order of words in verbal language. This scheme is based on the same idea as that of Sicard, viz: that unless the order of words in written speech is indicated by signs made in that order, written language will never be really mastered by the deaf and dumb. The most natural way of meeting and disproving this assumption would be to come at once to facts and inquire whether those who are taught by means of natural signs exclusively, are able to express their ideas in the forms of verbal language. Some practical examples, bearing on this, we hope to exhibit before closing this article. But, for the present, it would seem

sufficient to ask, whether it is in the power of natural signs to give clear ideas, we do not say on every subject, but on subjects such as children would be interested in knowing, and are capable of understanding. If the advocate of the method of making natural signs in the order of words in an English sentence admits this, as we are sure he will, then he shuts himself up to the absurdity of saying that a perfectly clear idea of the thoughts contained in a sentence, may be communicated to the mind, yet the sentence itself as given in signs, not be translatable into verbal language. But is the fact that different languages express the same thought by a different arrangement and order of words, to be regarded as so profound and incomprehensible a mystery that a deaf-mute mind cannot by any possibility be made to comprehend it? It is our experience that they can be made to comprehend it very easily and readily. Suppose that the deaf-mute at the very beginning of his efforts to learn language, has come to know the words *cat*, and *catch*, and *boy*. Making the sign for cat, which we do by putting the thumb and forefinger of each hand to the mouth as if taking hold of whiskers, and then stroking the back of the left hand to indicate the fur; then *locating* the animal; then, having made the sign for boy, we represent him as catching the cat, and write for the child the sentence, "A boy catches a cat." Does he not know what it means, and is there any difficulty in his modeling other sentences after this form? None whatever.

But, do the deaf and dumb really think in the inverted order? There is no doubt of it. At any rate, it is assumed that they do by the advocates of the change in the mode of making natural signs which we are considering. "So long," it is said, "as the deaf and dumb think in this inverted order, they will not write the English correctly. The structure of their own language must be changed, in order to work a change in their mode of conceiving of actions and events."

A very serious objection to this scheme of conforming signs to the order of words, is, it seems to us, that it removes from the learning of a new language one of its most important incidental benefits, viz: the exercise of the judgment in making the ideas of one language conform to the idiom and required structure of the other. The old "ordo" in Virgil is not now, we believe, thought to have been any real help to the student of Latin. The practice is babyish and weakening. Why not proceed in a manly way, and early make the mute understand that there is a difference between the structure of his language and that of the English, cause him to understand what this difference is, and, as in the case of other children, throw him upon his own resources and judgment in giving to each language its proper character? He is called upon to give a narrative in signs. Let him be required to give it in all points as the genius of the sign-language demands, and then when required to write the same narrative in English, to conform his language in all respects to the true order and structure of the English. In this way you give him what he especially needs, self-reliance and self-respect. In the one case you put him in leading strings. In the other you honor his capacity, and show that you believe him capable of walking alone.

But to proceed a step farther. How are the deaf and dumb to be induced to use this changed sign-language? Teachers may use it in school, but who is to secure its use by the deaf and dumb out of school? To one who knows how deeply imbedded in a language even unimportant trifles are, how impossible it is to work changes, even those which are acknowledged to be desirable, the idea of breaking off the deaf and dumb from the use of a language so attractive to them as that of natural signs, and inducing them to adopt in its stead one modeled after the English order of thought, appears Quixotic indeed.

But, if the mutes continue to use natural signs in their intercourse with each other, and will continue to do so in spite of all efforts to the contrary, then the argument founded on the change to be made in their mode of thought by the new language fails. And if the deaf and dumb continue to think in inverted forms they will, so far as their mode of thinking affects their mode of using English, continue to write imperfectly, in spite of the constant use by the teacher of signs in the order of words. In writing from signs, if he understands them, the mute will of course write more easily, more like an automaton, in the English order, than if the signs were not conformed to this order, but when left to himself to write out his own thoughts, if he still thinks in the inverted order, what shall hinder his language from being in that order? If it is said that it is not so as a matter of fact, then the whole argument for the change falls to the ground.

But finally, the change proposed would, in many cases, make the sign-language unintelligible, and, where it did not, would sadly mar its beauty and power. There is no sense of reality in signs made in the proposed method, even if the meaning could be conjectured, and this, of itself, is a fatal objection to the scheme. The language has been despoiled. Its life and grace have been crushed out of it. It is no more like the language of signs, loved by deaf-mutes, than the anatomical lecturer's skeleton is like the living man. In what a roundabout and unnatural, if not unintelligible way, such a sentence as this must be expressed if the signs are made in the order of words: "A man stamped on a snake's head." By natural signs the man *does* it. In the other case he stamps, then pictures the snake, and then says that it was the snake's head that his heel came down upon. Very awkward and clumsy, to use no stronger epithet, such signs must seem to the deaf and dumb. While we admit that a teacher of extraordinary vivacity as a sign-maker may

be intelligible, in many cases, in presenting the act before the object, yet we are convinced that most teachers would utterly fail to be so. The tendency of the practice would be to lead to the disregard of all attempt at locating objects, and to making merely signs for words in the order of the English, thus falling back on the method of Sicard, without any of the life and light of the natural signs in his system to redeem it from its folly. Indeed, this must be the result really aimed at, if the object is to change the mode in which the deaf and dumb think.

But is there not something deeper even than its advocates are aware of, in this notion of a new language of signs? We think there is. The sign-language deals mainly with material objects. It dreads and avoids the abstract. Outline, form, place, position, feature, are its leading elements. Spiritual ideas are indeed capable of being expressed, and vividly expressed, but they are those mainly of the simplest character. Trains of reasoning are not at home in signs. It is a beautiful and most expressive language, but not wide in its range. The range is that of partially developed minds, of children. There is, of course, a wide gulf between such a language as this and the cultivated and refined languages of the world. A gulf consisting not in the structure of the language, or very little in this, but in the subjects of which it treats, in the thoughts which are at home in it. All spoken languages, so far as their history is known, have once been to a greater or less degree in this state, and have, by centuries of growth and development, come up to their present elevation. So it would be, doubtless, with the sign-language, if it were used by the deaf and dumb to the exclusion of other languages and if they were advanced in culture in the use of it. As things are, the object being to bring the pupils of our institutions at the earliest practicable time to the use, and the exclusive use, of English, it is doubtful whether the sign-

language will ever be much farther advanced than it now is.

But, as it seems to us, the real, though perhaps the unconscious, object of those who propose this change in the sign-language, is to *divest it of all its distinctive features*, under the idea that the mute will thereby be prepared to enter into the English and make it his own. It is not inversions which constitute the chief difficulty in signs, but *ideas under physical forms*, and it will therefore be found, if the plan of making signs in the the order of words goes on, that location, conceptions of thoughts as in a picture, will be entirely abandoned by the teacher, and to the younger pupils the sign-language, as thus taught, will be vague and unintelligible. A boy does not become a man by dressing him in a man's clothes, and the only way to bridge over the gulf between signs and spoken language is to wait for age and culture to do their work; all the forms of English that are not beyond the capacity of the deaf-mute child being, meanwhile, diligently and faithfully taught.

We have intimated that before closing this article, we would give some specimens of the manner in which deaf-mutes who have been taught wholly by *natural signs* in their *natural order*, use the English language. Whatever defects may be noticed in the language of the subjoined papers, it will be seen that "inversions" are not prominent among them. It should be distinctly remembered that *words* are not only not given in natural signs, but that they are not even suggested. The deaf-mute, in such signs, is looking upon *events* and *objects* as upon the original scene. The following words represent as nearly as possible the order and import of the signs used in communicating a short newspaper story to a class of pupils who had been under instruction five years. The language into which these signs were translated is in each case the pupil's uncorrected production.

[Week past few, gentleman one, Iowa live, think box one, bees within live, send friend city another express.] [Gentleman box depot carry, cars come await.] [Cars arrive.] [Gentleman box give messenger.] [Messenger box take, put floor car.] [Cars begin go.] [Car shake.] [Bees frightened, fly box out, messenger, face sting.] [Messenger brush away, again, again.] [Cars town another arrive.] [Messenger think box put out best. [Box lift, carry.] [Bees many out fly around, sting.] (Messenger run, box throw platform, turn run car within, door shut.) (Bees outside angry very.) (Cars behind next windows open, people sit, newspapers read.) (Suddenly, bees windows through fly, people sting.) (People handkerchiefs, papers shake, bees drive.) (Cars begin go.) (Bees windows out fly, box home again enter.)

Some weeks ago, a gentleman in Iowa, wanted to send a box full of bees to another town by express. He thought, how he would send the box safely to the town by the express. So he took the box and went to the depot with it and waited there for some minutes for the coming train of cars which was going to the town. He gave the box to the expressman and the expressman entered into the baggage-car and put the box on the floor of the car and soon the train of the cars began to go. Suddenly the bees in the box were frightened by the noise of the running cars, so many bees got out of the box and some flew to the expressman and they troubled him. He thought that he had better take the box out of the baggage-car and leave it at the next depot. He had determined to do so. When the train of the cars stopped at the depot, he went to the box and took it up, but suddenly many flew around him and some stung him, but he was patient and ran and threw the box to the platform of the depot and he ran into the baggage car and shut the door. By the more noise and shaking of throwing them against the floor, almost all bees got out of the box and many flew into the cars in which passengers were sitting. While the passengers were busy in reading and talking, &c., the bees stung them and they tried to drive them away with their handkerchiefs, newspapers and hats, &c., but they did not obey them, but when the train of the cars began to go, they all got out and went back into the box which was their home.—E.

A few days ago a gentleman in Iowa thought that he would like to send a box of bees to his friends in another city by express, and so he carried it to the depot. When the train of cars came, he gave it to a express-man. The express-man put it in a baggage car. When the cars began to go, the bees were very much afraid and flew. They came to the express-man's face and he was much troubled. He tried to drive them away. When the cars stopped, the express-man thought that he had better take the box of the bees out of the car and let them go in the city. While he was

carrying it, many of them stung his face. He ran hurriedly out of the car and threw the box on the platform and he ran back into the car and shut the door of the car but when he went in the car, the bees were angry and flew out of the box to the people in two of the other cars and stung their faces while they were reading. They were much troubled and they tried to drive them off with their handkerchiefs. When the cars began to start, the bees went back out of the cars to the hive.—T.

A few weeks ago in Iowa a gentleman thought that he would like to send a bee-hive-box to his friends by express. Then he went to a depot with it and he gave it to the express-messenger. The train began to start. Soon the bees felt uneasy with the noise and they flew out of their home to the express-man. They troubled his face and stung it much. He thought he had better put the live-box away. He lifted it and carried it. Soon the bees went out of their home. He ran and carried it on the platform. He left his doings and he ran away and shut the door suddenly. The bees flew out of their home to some cars, in which many people and passengers sat and read newspapers and books. They stung their faces. They were troubled much by the bees. They tried to drive the bees off with their handkerchiefs and their newspapers. When the train of cars arrived at the city, soon the bees flew out of the windows to their home, which was on the platform. I think that the bees troubled the express-messenger's face, because he put their home in the box on the floor noisily.—C.

Without giving the other papers in full, we will only take from each those sentences which describe the attack of the bees on the people in the passenger-car, both as a sample of their merit, and as showing the workings of the different minds upon the same point. The differences of style will be noticeable and interesting.

No. 1. The people sat on their seats and read their newspapers. They opened the windows. They were very much troubled by the bees. They went into the windows. They stung at the people's faces. They tried to keep them off. They flew away.—H.

No. 2. The people were in the passenger car. They opened the windows and read newspapers. The bees flew in the windows and stung the people in the passenger cars. They were very angry to keep them off. The bees flew out of the windows.—M.

No. 3. There were a number of bees which began to fly out of the hive. While the people were reading the newspapers, they entered into the windows and stung them. They were much hurt.

When the train of cars began to go away, the bees flew out of the windows.—B.

No. 4. While the people were in the cars, the bees stung them, and they kept them off. The people were disturbed by the bees. The bees flew away.—S.

No. 5. Many bees flew into the windows and they stung the people, and they were troubled, and they struck many bees, and they flew out of the window of the passenger car.—C.

No. 6. The windows of the another car were opened. The people read their newspapers. The bees flew through the windows. The people struck them with their handkerchiefs. They badly stung the people's faces, and flew out of the door. They disliked the bees.—A.

No. 7. The passengers sat and read in the newspapers. The windows of the cars were all opened. The bees came through the windows. The passengers kept them off. It was dreadful.—Q.

No. 8. The passengers of the cars read the newspapers by the open windows of the cars. When the bees flew into the windows of the cars, they stung their faces and the passengers brushed them away. They were very much troubled. When the bees flew out of the window of the passenger car, the passengers were very glad and escaped.—McC.

No. 9. They began to fly into the windows of the passenger car. They tried to wave the bees off their handkerchiefs. Some people were troubled with the bees. The bees flew out of the windows. The some people were glad that they flew away.—B.

No. 10. The bees begun to fly into the windows of the passenger car. The people sat on the benches of the car who read newspapers. They stung the people's faces who had trouble with them. The people waved with their handkerchiefs the bees away. Many bees flew out of the cars, but some bees did not fly and remained.—McK.

No. 11. The windows of the other cars were opened. The people were reading papers or books. In a moment many bees were flying into the windows, and stung the people's faces, and they took their handkerchiefs out of their pockets and shook them with their hands. Many bees flew out of the windows of the cars.—G.

We would suggest and invite a comparison of the foregoing versions, in point of variety and correctness of style, with an equal number of similar off-hand exercises of a college class in Latin or Greek, upon a group of ideas given by the Professor in rapid extempore talk.

THE INSTITUTION FOR THE DEAF AND DUMB AND THE BLIND, AT STOCKHOLM.

BY EDWARD M. GALLAUDET, PH. D., LL. D., WASHINGTON.

One of the many islands on which the "Venice of the North" is lifted from the sea, is called the "deer-garden."

While the others have been filled up with streets and squares, the closely packed edifices of trade and dwellings of the people, this, the most beautiful of all, has been reserved for public uses. There are a few villas of the royal family and the nobility; but the owners must leave their grounds open to the free access of strangers. In the garden of one of these summer residences, belonging to the Queen Dowager, stands the porphyry vase famed as being the largest in the world, the bowl of which measures more than sixteen feet in diameter.

There are on the island several public institutions, the premises of which are also unenclosed, and the unoccupied portions of land are improved with drives and walks, so that the entire island is included as a great pleasure park, free to the people of Stockholm at all times. It may be reached in boats, or by means of a fine arched stone bridge which connects it with the city.

In lieu of the gondolas which grace the waters of her sister city of the Adriatic, Stockholm has hundreds of miniature steamers which puff hither and thither along the water streets of the city. These are largely used by pleasure parties; and with their gaily decked awnings form an interesting peculiarity of the place.

Setting out in one of these, I skirted the green shores of the "deer-garden" until I reached a landing called Manilla, where the first object that attracted my attention was a large enclosed bathing-pool, in which a hundred merry children were disporting their graceful forms. This was the bath of the Institution for the Deaf and the Blind: and here on a sultry summer

day the boys were winning that human virtue which is said to be next to godliness.

From the shore where I landed the ground rises rapidly, furnishing a site of great beauty for the principal buildings of the institution, not unlike that of Fanwood on the Hudson; and the buildings themselves in their style and color strongly suggest those of the New York Institution. That is to say, the front building does this, for the one in the rear, not seen from the water, is an old frame edifice, once the principal structure of the institution, but now used only for the blind department.

All the appointments of this venerable school, (it was founded very early in the century,) are now asow perfect. The Royal Government has taken it under full protection and the new building, which cost upwards of \$75,000, was paid for out of the public treasury.

The principal of the institution, Mr. Borg, is the son and successor of its founder, and is spoken of in Stockholm as a man of unusual fitness for his position. The management of the institution certainly seemed to be excellent. A military exactness prevailed, which found a partial expression in the wearing of a uniform by both teachers and pupils.

In the chapel, which is used by both departments of the school, stands a monument of the liberality of one of Sweden's fair daughters, who will not soon be forgotten in America—Jenny Lind—who presented a magnificent organ some years ago, for the use of the blind.

To give a detailed description of the institution is not the purpose of this sketch—but rather to call attention to the peculiarity of its location and the beauty of its surroundings, so that perchance these words may some day have weight in the establishment and perfecting of some similar institution.

Teachers of youth do not always remember how deep are the impressions made by the objects presented to the eye from day to day, and those who would place a school for the young in the midst of a crowded city perhaps forget that

One impulse from a vernal wood

May teach you more of man—

Of moral evil and of good—

Than all the sages can.

REPORTS OF AMERICAN INSTITUTIONS FOR THE DEAF AND DUMB.

BY THE EDITOR.

In our notice of the Institution Reports this year, we do not give the number of pupils and teachers of the several institutions, inasmuch as the information on these points contained in the tabular statement published in the January number of the *Annals* of the present year is in nearly all cases as recent, and in most cases more recent than that of the reports, and the next number of the *Annals* after this will contain information later than either. We mention, however, such important changes in the *personnel* of the several institutions as are indicated in the reports.

Perhaps this is as appropriate a place as any for calling the attention of the principals and superintendents of our institutions to the request which a teacher in a western institution wishes us to make, viz., that a sufficient number of copies of the reports shall be sent to each institution to enable every teacher to have one. This is already done in a few cases; but usually not more than two or three copies are sent to each institution, of which the principal takes one and the others are soon lost or destroyed. The request seems to us a reasonable one, as much of the

information contained in the reports is valuable and interesting to all the teachers, and desirable for future reference. Those portions which seem to be of the most general interest and permanent value, are, it is true, transferred to the pages of the *Annals* in our annual review: but of course we are compelled to omit many things that teachers would like to read and some things that they would like to preserve.

In the *American Asylum* there have been several changes among the officers. Mr. Edward C. Stone has succeeded his lamented father as principal. Miss Sarah W. Storrs and Miss Clara E. Seaverns have left the institution; Miss Caroline Sweet has taken an ordinary class and is succeeded in the department of articulation by her sister, Miss Julia Sweet. Miss Elmira D. Clapp, a graduate of the institution, and Miss Kate C. Camp, a daughter of Mr. Henry Camp, formerly an instructor, have been appointed teachers.

Much of the report is devoted to the memory of the late principal, the Rev. Collins Stone. Resolutions and other tributes of an official nature from various sources are published, and the sketch by Professor Porter which appeared in the April number of the *Annals* is reprinted in part. Appropriate mention is also made of the death of Mr. Barzillai Hudson, who was one of the original corporators of the Asylum and up to the time of his decease an active member of the board of directors.

"The class in articulation has been continued as it was organized the previous year. Instruction in lip-reading and speaking, as an art, rather than as a means of imparting knowledge, has been given to those most likely to profit by it for a portion of each day. while their education has been carried on by means of the sign-language in their regular classes. Thirty-five pupils have been so taught during the year; several have been dropped as unpromising subjects; and at present the class consists of twenty-two, most of whom are semi-

muters. The improvement made in this branch of instruction is commendable."

On the subject of day-schools Mr. Stone says:

"Within the past year, the subject of day-schools for the deaf and dumb, where the children board at home and are taught for four or five hours a day, as other children are, has received some attention in this country, and schools of this kind have been opened at Pittsburgh, Boston and Chicago. They must of necessity be confined to the vicinity of large cities, and are not practicable elsewhere. The early instruction of mute children is very desirable, and the philanthropy which searches our great cities, where most of them are found among the poorest and lowest classes, and which seeks to elevate them, deserves our highest commendation. Still, while the influence of a well-ordered home is so happy, the disadvantages of one that is not are so great, that our large institutions, caring for the physical, intellectual and moral welfare of their pupils, in every way, and all the time, and also providing instruction in the trades, would seem to be better adapted to the needs of these neglected ones than day-schools can be. Much good can undoubtedly be accomplished in the day-schools before the child is old enough to be sent away from home, and the result of these benevolent enterprises will be looked for with great interest."

The *New York Institution* has the following new teachers: Mr. William E. Clarke and Miss Bessie Fitzhugh, who hear and speak; and John R. Burnet, M. A., Thomas H. Jewell, and Miss Annie Wager, semi-mutes; the two last-named being recent graduates of the high class. Mrs. Clara P. Johnson is the only teacher who has left the institution.

The intellectual department has been classified into five grades, viz., the primary, the intermediate, the academical, the articulative, and the high class, according to the standing of the pupils. A portion of the

high class, also, both male and female, "who, by reason of early advantages, natural facility, superior diligence or any other cause, were enabled to get much in advance of their fellows, have been placed in a supplemental class by themselves, to which were admitted several of the deaf-mute teachers who desired to place themselves in point of attainments on a footing with men of collegiate education or its equivalent." Instruction is given to this class by a number of liberally educated men among the instructors who have heretofore been known as *professors*, but have not had any special chairs. Special departments of instruction have now been assigned them by the principal, without formal action on the subject by the board, and they give lessons in their several specialties to this supplemental class in the afternoon in addition to their regular duties in the class-rooms in the morning.

Articulation and lip-reading are still taught by a professor, assisted by two lady-teachers.

"The success," says Mr. Peet, "it is believed, is as great as can be found in any other school. We can show remarkable cases of proficiency both in speaking intelligibly and in reading readily on the lips, including some who were deaf from birth. Still, we have found no reason to change the opinions, long held and often expressed, that exercises in articulation and lip-reading are beneficial only in exceptional cases; and that for the greater number of the deaf and dumb they would be time and labor wasted, beyond so much as might avail in each case to test the capabilities of the individual, and, also, I may add, to give him so much use of his voice as may be needful to summon help in emergencies, or to gain control of domestic animals. At present, fifty of our pupils are in the articulation department. The number may be increased hereafter, if it shall appear that a greater proportion of our pupils are capable of deriving decided benefit from vocal exercises.

"All branches of education below the grade of the high class are attended to in this department, from the simplest lessons in language to arithmetic, geography, history, natural philosophy and composition. Pupils in this department are transferred to the high class as soon as they have become thoroughly fitted for it.

"Besides his regular duties as principal teacher in the articulation department proper, Prof. Engelsmann gives daily attention to training the instructors of classes in the other departments, to teach articulation, the object being to give such lessons to all the pupils in the institution, devoting to each time enough to discover whether or not his capabilities are such as to warrant the expenditure of time and labor.

"Perhaps it may be found, that with those pupils whose facility in learning to speak and to read on the lips is decided, (and only with these, will such instruction be advisable,) as much progress may be made in these accomplishments by giving articulation lessons for a portion of each day, the pupil still following the course of his class taught mainly by signs, as by conducting his education wholly by means of articulation and lip-reading. This experiment is now in process of trial here, and I await the result with much interest."

Upon the subject of "Social Influences," Mr. Peet says:—

"Few people understand or realize how peculiar the social and intellectual life of the deaf and dumb must necessarily be; in what a different atmosphere, so to speak, they must live and move and have their being. The inexorable law that, under whatever system instructed, they can communicate with their fellow-men only through the eye, or, in the dark, more slowly and imperfectly by the touch, at once stamps all the deaf as a people apart.

"It is in vain that the advocates of articulation and lip-reading propose restriction to that kind of instruction as a remedy for this comparative isolation of a deaf

man among those who hear, for however diligently and successfully the faculty of reading on the lips may be cultivated, it will not avail to enable the deaf to follow a sermon or other public discourse, or to share in the general conversation of a social circle.

"It is only in their own language of signs that deaf-mutes can be eloquent or graphic, or enjoy the eloquence of others. In that language only can they share on equal terms in a general conversation, and by no other medium can they exchange ideas with that rapidity natural to the active mind of youth. When words have either to be spelled or written out at length, or articulated with laborious distinctness, conversation becomes comparatively tedious, even to those whose knowledge of alphabetic discourse is the most intimate. The best educated among the deaf, placed in a society where signs are not understood, find themselves at a great disadvantage. Their communications must necessarily be slow, and made individually. Thus they can only learn the few leading facts of what is passing around them, or, in the language of Dr. Kitto, one of the most eminent of deaf men, gain "only the dry bones of conversation without the grace, the drapery, the gilding." They cannot, like those who are blest with the faculty of hearing, sit quietly enjoying the flow of conversation or the eloquence of a public speaker. But in a society where the language of signs is used they find themselves able to share to the full extent all the intellectual and social enjoyments and religious privileges which depend on the rapid and unimpeded flow of thought from mind to mind.

"The mere society of the institution, where the pupils and teachers gather in circles to enjoy the wit, logic, or eloquence of the best minds among them, or to share the experience of all who have met with adventures, is in itself a powerful stimulus to mental activity and a means of intellectual culture. Lectures and debates furnish further opportunities outside the school-

rooms for intellectual enjoyment and improvement. When the pupils of any class receive from their teacher any new or interesting fact or amusing anecdote, they are apt to impart it by signs to their school-mates of other classes, till it becomes common property. Thus it is that the use of our expanded and improved language of signs tends in so great a degree to raise the general standard of intelligence among the pupils of the institution, and to favor the rapid development and free and joyous exercise of their faculties.

“Hence it is that the society of the institution is so attractive to all who have once tasted its enjoyments. The pupils generally regard it as their Eden. Most of them return to it at the close of their vacations with willingness, even with eagerness, and leave it at the end of their terms with regret.”

The report of the board of directors gives the details of the sale of a portion of the land belonging to the institution. Nine and a half acres were sold for \$263,000. “The institution thus realizes from the sale of less than one-third of its grounds, exclusive of future streets and avenues, about two and a half times as much as was paid for the whole seventeen years ago. The result of this transaction is, that the institution is now practically free from debt.” Its financial condition being thus improved, it is proposed to complete and extend the building, to increase the facilities for teaching horticulture, and to add to the list of trades printing and some of the arts of design. The importance of having a printing office in the institution is earnestly urged both in the report of the board and that of the principal.

The *Kentucky Institution* reports no changes in its corps of officers.—A valuable piece of land adjoining the grounds of the institution has been added to its estate, supplying space needed for physical exercise of pupils, a larger garden and an orchard.—There has

been but one death among the pupils of the institution within seven years.—We are glad to notice among the items of expenditure an air-pump, a barometer, a microscope and other philosophical apparatus.—Appended to the report are some useful directions to parents and friends with regard to the early home training of deaf-mute children.

From the *Ohio Institution*, E. P. Caruthers, M. A., has gone to become principal of the Arkansas Institution, accompanied by Mr. R. H. Atwood as a teacher; H. H. Hollister, M. A., has become principal of the West Virginia Institution, and C. W. Ely, M. A., principal of the Maryland Institution. The new teachers appointed are Miss Rosa Gildersleeve, Miss Abby M. Hyde, Miss Charlotte A. Lathrop, Miss Sarah Noyes, Miss Gertrude Wooster and Robert Patterson, B. A. "In Robert Patterson, B. A., we have the first Ohio graduate of the National Deaf-Mute College at Washington D. C., bringing to his work, as he does, the grace and facility of the mute, disciplined and trained by the highest culture of the schools."

Mr. Fay's report contains some valuable statistics concerning the school age of the pupils, the actual age of the pupils, the average age of each class at entrance, the causes of deafness, the age when deafness occurred, and the county distribution of pupils and of uneducated deaf-mutes. From the first table it appears that the present average school age, is less than two years, the high class even averaging less than six years, and only 75 being beyond their third year. The average actual age of the high class is 19.17, of the lowest class 10.70. The average age of the high class at the time of admission was 14.47, and of the first class below that, 15.05; while of the last two classes admitted, it was 11.63 and 10.65. "It is pleasant to notice the dropping down from fifteen and above, to eleven and below. We may anticipate that hereafter, by this earlier entrance,

the mental and moral growth of our pupils will be greater, and that each year so saved, will be added to the more intelligent and ennobled stage of existence succeeding graduation."

Of the 1183 pupils received since the opening of the institution, the alleged causes of deafness are as follows:—

Cause.	No.	Cause.	No.
Not reported.....	36	Teething.....	8
Reported unknown.....	96	Rickets.....	5
Congenital.....	401	Erysipelas.....	5
Scarlet fever.....	122	Scrofula.....	5
Brain fever.....	62	Quinine.....	4
Spotted fever.....	26	Smallpox.....	3
Typhoid fever.....	20	Paralysis.....	3
Bilious fever.....	4	Diphtheria.....	4
Congestive fever.....	2	Ague.....	3
Typhus fever.....	2	Croup.....	3
Lung fever.....	2	Mumps.....	2
Yellow fever.....	1	White swelling.....	2
Catarrhal fever.....	1	Chicken pox.....	2
Fever.....	45	Worms.....	2
Sickness.....	99	Dysentery.....	2
Sores in head.....	70	Neuralgia.....	1
Measles.....	37	Rheumatism.....	1
Cold.....	32	Bronchitis.....	1
Fits.....	19	Calomel.....	1
Whooping cough.....	20	Cruelty.....	1
Accidents.....	18	Gout.....	1
Hydrocephalus.....	8	Swimming.....	1

The alleged age when deafness occurred, in these 1183 cases, is as follows:

Age not reported.....	239
Congenital.....	401
Under 1 year.....	176
Over 1 year and under 2 years.....	156
“ 2 “ “ 3 “	64
“ 3 “ “ 4 “	44
“ 4 “ “ 5 “	32
“ 5 “ “ 6 “	17
“ 6 “ “ 7 “	12
“ 7 “ “ 8 “	19
“ 8 “ “ 9 “	8
“ 9 “ “ 10 “	2
“ 10 “ “ 11 “	2
“ 11 “ “ 12 “	2
“ 12 “ “ 13 “	2
“ 13 “ “ 14 “	2
“ 14 “ “ 15 “	1
“ 15 “ “ 16 “	1
“ 16 “ “ 17 “	1
“ 17 “ “ 18 “	1

Upon the principles of instruction, the use of the sign-language, and of articulation, Mr. Fay makes the following remarks:—

“The aim and scope of the school-room is to give an education parallel to that of the public schools of the

State. Mental discipline and the acquisition of knowledge are contemplated at every step. Owing, however, to the mute's absolute ignorance at the start, of the use and meaning of a single word, and the peculiar difficulties in the use of language inevitably hedging him about after he has begun to possess it, the teacher bestows upon the teaching of language an amount of labor, skill, and patience not required elsewhere. Every branch of knowledge pursued is made subsidiary to it, and we are accustomed to estimate the degree of a pupil's progress by his ability to use it. Relief from social isolation is the great burden and humane endeavor of our instruction. While the ability to read readily, and to write correctly, is not a strict measure of the mental power or the learning of the pupil, yet it is the best measure of his real value in the world's broad arena of actual affairs. Disciplined intellectual power, and materials for mental consumption have their use like the capital of business, while both are only incidentally mentioned or seen. At this point an error in judgment is liable to arise. Some educators, with their eye solely, or wellnigh exclusively, upon actual affairs, advocate the constant use of written, and some even of oral language. Their counsel is, read, read, write, write, talk, talk. Others, more familiar with the mental habits of mutes, and aware that with them—nearly all semi-mutes included—the sign-language will be the one vernacular to them, use it with discrimination, and find in it a valuable auxiliary. The development mentally of the pupil is augmented manifold, and a supply of mental force is accumulated which enables him to grapple with the difficulties of written language more successfully in the end. The use of good scaffolding must attend the erection of every building. As scaffolding is in architecture, so is the sign-language in mute education, and only tyros in architecture or education would dispense with either. The riper the experience, the deeper the conviction becomes of the necessity and

usefulness of the sign-language, and in its use we find the corner-stone of all deaf-mute institutions. The cultivation of it, and its effective use, are and must be the only peculiar, although not the chief qualification of the teacher. He will teach written language by the sign, laying aside the latter as soon as the ready use of the former has been secured. It is not necessary to descant upon the beauty, the grace or the power of the sign-language. The mute has no other, and the teacher must use and improve it as best he may. The uncouthness, the uncertainty, or the lack of expressiveness which he may have deplored, he will find to be largely subjective qualities, capable of elimination.

“These principles of deaf-mute education apply with a certain force to the teaching of articulation. Teaching articulation, and teaching by articulation, are very different things. The former is possible in many cases, and advisable in some. The latter can be done, in institutions at least, only at the expense of mental growth and sound learning. Such seems to be the lesson of our two years’ careful experience with thirty semi-mutes. All, without exception, hungered for the expression of knowledge in forms primarily addressing the eye, and unconsciously translated the speech of the teacher and the words of the text-book into such language. My observation, extended to several institutions, has given the same results. The better method, it is believed, will be found to be the teaching of articulation to susceptible pupils as an art, making no attempt to supplant a language, to them the only natural one, by another which will always be to them an artificial one in the most real sense of the word. All mutes, semi-mutes included, crave a language whose elements are addressed to a living sense. Acting upon this opinion, we are this year giving instruction in articulation and lip-reading, by a teacher experienced and skillful, to semi-mutes and any others who desire it, neither attempting nor desiring to limit them to oral and writ-

ten speech in the acquisition of the several branches of general education. The results being obtained in this particular branch, and also in the general culture of these pupils, are highly gratifying, and it is believed that for the present the pursuance of the above method will be found to be the true policy for the institution, standing ready always to adopt any modifications justified by sound theory, our own experience, or the experience of others."

Last year two semi-annual examinations were substituted for the annual one, with beneficial results. "Another feature, useful in the same direction, has been the giving of a monthly exhibition of results, three classes being successively presented upon each occasion. The frequent occurrence of this regulated public inspection is believed to be salutary in its influence upon all concerned."

It is earnestly urged both in the report of the board and of the superintendent, that advantage be taken of an opportunity now offered to increase the size of the institution grounds, which are far too small, by the purchase of additional land.

Included in the superintendent's report, is an account of the re-union of graduates held in August, 1870, and of the formation at that time of an alumni association. The following, and other statistics were gathered concerning the 132 deaf-mutes present at this re-union. 55 were, or had been, married. Of the 61 men present, the occupations were as follows:

Farmers.....	22	Postmaster.....	1
Teachers.....	7	Brewer.....	1
Shoemakers.....	4	Carriage-maker.....	1
Laborers.....	4	Sawyer.....	1
Students.....	3	Cardwriter.....	1
Carpenters.....	3	Bookbinder.....	1
Peddlers.....	2	Printer.....	1
Cabinet-makers.....	2	Engraver.....	1
Tailor.....	1	Harness-maker.....	1
Retired gentleman.....	1	Boiler-maker.....	1
Belt-maker.....	1	Sexton.....	1

"The family statistics of 37 couples were obtained. Both parties were mutes in every case but one, and in that family are two hearing children. Four families have no children. In the 32 families remaining, there

are, or have been, 91 children, 9 of them mutes. These 9 mutes have appeared—4 in one family, and one each in five families. These six families, in addition to the nine mutes, have had ten hearing children.”

The report of the *Virginia Institution* devotes more space than usual to the mechanical department, giving details of the *ten* various trades which are there taught; a portion of which, however, are for the blind pupils. “The carpenter’s and cabinet shop, besides answering all the ordinary and extraordinary demands upon it during the past session for necessary repairs to the buildings, for school, dining-room, and kitchen furniture, etc., has added to its efficiency from time to time by erecting a turning-lathe, a circular saw, and a scroll-saw, which are driven by the steam-pump in the boiler-house adjoining, thus economizing the power of three horses. But, more than all this, the foreman of the shops, aided by his four or five deaf-mute apprentices, and the occasional assistance of a regular journeyman, has erected and completed during the past session, in the extensive gardens of the institution, a neat frame cottage, in the Elizabethan style, whose dimensions are thirty feet in length, fifteen feet in width and twenty feet in height, thus for the first time affording to a class of deaf-mute youths at the institution a favorable opportunity for framing, erecting and carrying out the plan of a house in all its details. The cost of this cottage, built in the manner described, has not exceeded one-third the estimated cost of such a building in our town, viz., \$2100.”

From the *Indiana Institution*, Miss Susan Wallace, a deaf-mute teacher, has retired, and Miss Sarah C. Williams, a graduate of the high class of the institution, has taken her place. The former steward, Mr. C. C. Foster is succeeded by Mr. Geo. W. Cox.

Mr. MacIntire, in his report, speaks of the importance of a proper gradation of the classes and of the advan-

tage which a large institution has over a small one in this respect. "Large classes well graded are better, and will improve faster under a competent teacher, than small ones made up of different grades. Pupils of one, two and three years' advancement in the course of study can not be profitably instructed in the same class. Each grade, whether it consists of twenty or five pupils, requires, in order to gain the best results, the attention of a separate teacher; and, provided they should be of the same grade, he could instruct the former number as well as he could the latter.

"In an institution where the course of study is limited to seven years, a tolerably efficient classification can be made with one hundred and eighty pupils, allowing one grade for irregular and anomalous cases, requiring special instruction, and dividing each year the new pupils into two grades according to age and mental development. This will allow a very good classification, provided the girls and boys be instructed together, a practice common in this country, though seldom found in Europe, where they are generally taught in separate classes, and often in separate institutions. In the case supposed above, no allowance is made for an advanced course or for the establishment of a high class. This could not be well sustained in an institution with a number short of two hundred pupils, without unduly multiplying the number of teachers.

"In an institution having a seven years' course of study in the primary department and a three years' course in the high class, two hundred and fifty pupils admit ordinarily of the best classification. If the number should be larger than that, the same evils would be experienced as with a less number; the classes would be too large, or there would be fractions of classes unprovided for, or what is worse, pupils would have to be put in classes above or below the grade to which they properly belong, and in which they could make the greatest improvement, unless additional teachers

should be employed. Two hundred and fifty admit of full classes, and, of course, of fewer teachers. This institution has now nearly reached the number of pupils allowing the best and most economical and advantageous classification."

Instruction in articulation and lip-reading is given to semi-mutes. Mr. MacIntire explains the advantage which persons of this class have over deaf-mutes proper, in their knowledge of language at the outset, and adds:

"In the case of those born deaf and those who become deaf before they learn to speak, an education can best be acquired, as is now almost universally conceded by those conversant with the matter, by means of natural signs. A few contend that semi-mutes should be educated by means of articulation to the exclusion of signs. While we do not exclude oral speech as a means of mental development and moral training, we do not rely upon it as the chief instrument, even in the case of those who retain in some measure the power of speech. After a short time spent in articulation, signs, with the aid of the manual alphabet and writing, become a more rapid, pleasant and efficient means of communication and medium of acquiring knowledge than the best oral speech of those who are deaf. Therefore, those in this institution who take lessons in articulation are not allowed to neglect their regular studies. They are taught by signs, and trained in oral speech. Morning and evening prayers, the public reading of the Scriptures and all the Sabbath services are conducted in the language of signs, as well as the ordinary instruction of the classes, and are participated in by all the pupils."

Mr. MacIntire says that of the 240 pupils of the institution, none are retained there during the vacation. "For the few whose friends are unable to defray the expense of going to and returning from their homes, the law makes provisions; it provides that at the end of the session their traveling expenses shall be paid by

the institution and charged to the county to which they belong. For those who have no suitable homes to go to, we have found no difficulty in securing, through the county officers, proper places for them among their acquaintances and neighbors to spend their vacations. Precedent to the reception of new pupils it is required, in such cases, that the name of a responsible person be furnished, with whom we may correspond and to whom the pupil may be sent at the close of the term, and who will see that he or she is cared for and returned at the proper time."

The report contains a tabular statement of the annual aggregate current expenses,—including ordinary repairs, and excluding buildings and improvements—of nine of the largest institutions in the United States, compiled from the latest reports of these institutions, from which it appears that the average annual cost per pupil is \$251.77;—"much less than it costs to support a pupil in any of our academies and seminaries."

The *Missouri Institution* has lost one of its teachers by death; Mr. Richard P. Kavanaugh, who had been in the service of the institution for twelve years.

In speaking of articulation, Mr. Kerr quotes the summary of the conclusions arrived at by the committee of the Massachusetts legislature, which, in 1867, made an extended investigation of the methods of instructing the deaf and dumb. As we believe this summary has never been published in the *Annals*,* we quote it here also:—

"1. That both the French and German systems have been taught for centuries.

*Indeed, we do not recollect that this exceedingly interesting report of the Massachusetts legislative committee has ever been mentioned in the *Annals* at all. It constitutes, with its accompanying documents, an octavo volume of 236 closely printed pages, and contains a phonographic report of the arguments made before the committee by Dr. Howe, Dr. Turner, Mr. Stone, Mr. Day, Mr. Hubbard, Mr. Sanborn, and others. The articulation question has nowhere been more fully and freely discussed than here.

"2. That both are taught in all the principal schools in this and other countries, except in Germany, and in the London Institution, where articulation is chiefly relied on.

"3. That the sign-language and manual alphabet can be taught to all classes of deaf persons, and to deaf-mutes, and are the most effectual means of communicating information to a large majority of such persons.

"4. The advocates of both systems admit that articulation can be taught to some deaf-mutes, but not to all, but differ as to the number. It is a question of proportions. The fact that it has been adopted by so small a portion of the schools throughout the world, seems a strong argument against its exclusive use in any school intended for all classes of deaf-mutes. Your committee believe that to the majority of those congenitally deaf, or who lost their hearing in infancy, it cannot be successfully taught; but that it can be, to the majority of semi-mutes and semi-deaf persons.

"5. That the ability to articulate is so great a blessing that it ought to be retained, or restored, if there be a possibility of doing so, even at the sacrifice of some other advantages. That the earlier the effort is made, the greater the hope of success.

"6. That success depends in some measure on faith in either theory; and that the danger is that the advocates of each will be too much wedded to their favorite method. But no public school ought to be devoted exclusively to either.

"7. That lip-reading or lip-signs may be taught to nearly all pupils; and there does not seem to be any necessary connection between it and articulation, nor does it appear why it may not be learned by children entirely incapable of articulation, or be taught with, or by, the manual alphabet, or *vice versa*.

"8. That the evils of 'aggregation in intensifying an infirmity,' do not seem great enough to recommend the

abandonment of large institutions, or to counterbalance advantages which they offer.

"9. That a small number only can be taught lip-reading by one teacher, and that when learned, it can be made available only in a favorable light, and at short distances."

Mr. Kerr adds:

"It seems to us a well-established fact that sign-language, appealing to the lowest order of intellect, reaching and stimulating where articulation makes no impression, is the great instrument through which we must reach and educate the deaf-mute; yet, that we may not be behind other States, but be thoroughly abreast with the advancement and improvement of the age, and that we may employ all methods promising success, it will be highly proper and advantageous to appoint a teacher competent to give instruction in the articulate method, for the benefit of those who can be improved thereby, especially for semi-mutes. While it will ever be true, that a large majority of our pupils can be more successfully instructed by the French method, yet we should not fail in any of the facilities furnished by other States, on account of the additional expense incurred by the appointment of a teacher trained in the German method."

The report of the superintendent and that of the commissioners urge a change in the law restricting the number of teachers, so that the number may be increased; also the extension of the buildings and the purchase of additional land.

Mr. Kerr's report contains some useful directions for the early home-training of deaf-mute children.

The *Louisiana Institution* has made an important change in its organization, in the separation of the blind and the deaf and dumb, heretofore united. The two departments remain under the direction of one board of administrators, but they are carried on in separate establishments, each with its own chief execu-

tive officer; Mr. McWhorter continuing the superintendent of the deaf and dumb.

Mr. McWhorter urges, in his report, the importance of making the institution in every respect a pleasant *home*. Instead of separating the boys and girls at their meals, and forbidding conversation, he would make the table "the meeting place of a merry group where boys and girls can talk freely and laugh heartily; where good cheer may develop good breeding, and not a place of silent, animal gormandizing, or of sullen discontent." He does not regard fear as a necessary ingredient of respect. "Dignity, force, command, need not the medium of a stern countenance, or rasping words, or of impending danger of physical pain."

Of articulation and lip-reading, Mr. McWhorter says that this method of instruction "has the advantage of a fascinating possibility of teaching the deaf to speak and understand language from the lips of others, but the serious objection of impracticability in a very large majority of cases. Not more than one in ten, and that one generally a semi-mute, having learned to speak before becoming deaf, can best be educated by this method. But even this small proportion has led to the wise provision in the larger institutions for educating by this method in any case believed to be the best for the pupil. At the same time there is room for regret that so much precious time has been spent in this tremendous work of attaining an accomplishment which is almost sure soon to lapse into disuse."

With regard to the education of the colored deaf and dumb, of whom there are probably fifty proper subjects in the State, Mr. McWhorter says that an equal opportunity is offered them, "but it is not embraced, though the same efforts have been made to give them the proper information, as to others. Whether the reason is to be found in a want of interest, or knowledge, or in an habitual sense of inobtrusiveness and delicacy in doing violence to the feelings of any other class, no

evidence affords any solution.”—The solution of this question of the education of the colored deaf and dumb, so important in the South, is not yet reached.

Mr. McWhorter has examined the new census returns for the State of Louisiana, and says that in many cases the fact of deaf-muteness is not recorded. “In New Orleans, with only a partial canvassing of the city, I find that at least one fourth of these unfortunate children were overlooked. In answer to the question, addressed to some of the parents, as to how this omission occurred in the instances of their children, I learned that no questions were asked if any mutes or blind were in the family, and a feeling of delicacy, or an ignorance of any duty to report voluntarily, very naturally led them to remain silent, and so permit this unfortunate omission. Another defect in the census as respects utilizing the statistics for the benefit of these classes, is the want of the post-office address of each person, nothing more definite being given than simply the name of the Parish in which they live, with the single exception of the city of New Orleans where the district is also specified.”

The *Wisconsin Institution* reports that Mr. L. Eddy has returned to its service with restored health, and an additional teacher, Miss Julia Northrop, of Mauston, Wis., has been employed. Since the publication of the report, it may be proper to remark here, Dr. George L. Weed has succeeded Mr. Edward C. Stone as principal, and Mr. W. A. Cochrane has gone to teach in the Michigan Institution.

In the school “three public examinations are held during the year; the one in June being the most critical. It is conducted by a committee, and all the exercises are carefully marked, both to find out the progress made, and to fix the standing of the pupil for the year to come.

"The class in articulation and lip-reading numbers twenty-one pupils. Nine entered this fall, and among them are a few congenital mutes, and also a number of semi-mutes and semi-deaf, who cannot be taught in our common schools, and here receive especial attention and patient training, which they cannot elsewhere obtain. This portion of the class remain with their teacher all day. With them success is certain. They have a partial knowledge of spoken language, which is retained and improved, and made the basis of their education.

"The class of last year are improving in distinctness of utterance and fluency in lip-reading. They recite about an hour a day, and are taught by signs the rest of the time. Four of the best members left at the close of the year, all of them having been much benefited. One young man who lost his hearing at fourteen, and could not understand a simple question eighteen months ago, can now understand conversation with tolerable ease, even from bearded lips. Most of this class can understand anything read slowly, from the lips, as well as they could if the book were in their own hands.

"The progress made is encouraging, and is especially gratifying to relatives. This department is not yet permanently established in this or other institutions in this country; but it is believed that a portion in our large schools can be so instructed, with profit."

The institution having increased much in numbers, necessary additional accommodations are asked for by the trustees.

The *Michigan Institution* reports several changes in its corps of officers. Mr. L. D. Pomeroy, a speaking gentleman, and Mr. P. N. Nicoles. Mr. W. S. Smith, and Miss E. A. Petrie, deaf-mutes, have left the institution; Mr. Pomeroy and Mr. Nicoles have since died. Their places are filled by W. A. Cochrane, M. A., formerly of the Wisconsin Institution, Miss Annie

Churchill, a graduate of the New York Institution, and Miss Mary Alderman and Mr. John Buchanan, graduates of the Michigan Institution.

Mr. Bangs devotes some space, in his report, to enlightening the general public with regard to the actual condition of the deaf and dumb, and correcting the errors into which persons but little familiar with them are apt to fall. He explains the principles of the sign-language, which he believes follows the natural order of thought, while the English order of expression is inverted and artificial. He gives some amusing illustrations of the errors which the teacher of deaf-mutes is continually finding on the slates of his pupils: as, for instance, where, by a slight transposition of the letters of a word, the honorable trustees of the institution were characterized as *Strutees*.

Twenty-five pupils have been taught articulation. "The time for teaching is so arranged that it does not interfere with the regular school sessions of the classes taught by signs; so these twenty-five pupils have the full amount of instruction in their sign classes, and their articulation as an extra. An hour and a half after breakfast, an hour after dinner, and two hours before supper, are devoted to teaching articulation, and each pupil receives from ten to fifteen minutes of separate individual instruction. This method is thought better, as a general practice, than to drill in classes. Of course it will not be expected that pupils making all their communications by signs for fourteen or fifteen hours a day, and receiving individual instruction in articulation only ten or fifteen minutes each day, will at once make very proficient talkers. Yet it is found that these pupils, by this short daily exercise, will retain all the power of speech they had when they lost their hearing, and most of them will learn to speak new words, and make considerable improvement. No doubt some of the best articulators of these twenty-five pupils might make much greater proficiency in talking, if they stopped the use

of signs and used only their voice in communicating with others; but this would be such a separation, and a cutting-off of communication with the great majority of the pupils here, that it would be impracticable, and any attempt to enforce such separation would produce unpleasant feelings amongst the pupils and a strong prejudice against articulation itself. The majority of these twenty-five articulators are not so good talkers but that they can be developed faster mentally by the use of both signs and articulation than by articulation alone."

Mr. Bangs urges an extension of the course of instruction and the establishment of a high class, but argues that the members of the high class should not be exempted from the labors of the shop out of school-hours.

"When a boy has been here through the whole primary course—when he has entered upon higher studies—then, if ever, he can begin to work in earnest at mechanical pursuits. Then, if ever, his services in the shop will be of some value to the institution. Therefore, while strenuously advocating the establishment of a high class, I would insist upon having every male member of it a regular attendant upon the workshop, thereby giving him the highest culture both of head and of hand. Then when he leaves us, if he knows enough to be a successful teacher, and can secure an appointment here or elsewhere, let him do it; if not, let him go to work with his hands, with a fair prospect of finding remunerative employment."

The *Texas Institution* attributes its small number of pupils, in comparison with the number of deaf-mutes in the State, to "the imperfect facilities of travel, making it difficult, if not impossible, for parents to spare from their ordinary avocations the time necessary to convey their children to the institution, especially when, by the contingencies of swollen streams and impassable roads,

their absence from home might be prolonged for weeks and perhaps for months. But we may hope that this difficulty will rapidly disappear. With an increasing population we may expect that the roads will be kept in better repair; that bridges will be built, and ferries established. And finally the extension of our railway system will bring the remotest portions of the State within easy distance of the capital. We may, therefore, look for a much more rapid increase in the number of our pupils in the future than we have experienced in the past."

It is urged that, instead of enlarging the temporary buildings now occupied, a suitable plan be prepared for future permanent buildings, and that such parts as are needed for present use be put up immediately, leaving the remainder to be added as necessity may arise.

In the *Columbia Institution* the Rev. J. W. Chickering, M. A., has become professor of articulation, and has given instruction to twenty pupils and students.

In the college "the general standard of scholarship and manly bearing among the students has been steadily advanced, and evidences have been multiplied on every hand to satisfy those who are most familiar with the work of the college that the liberality of the Government in establishing and sustaining such a work is yielding results for good, fully commensurate with the amount of money required for the proper furtherance of the enterprise." President Gallaudet, in justification of the expenditure of time and money necessary to the collegiate training, gives a detailed statement of the positions which the college graduates have thus far been called upon to fill and the income they now receive, which gives an average of over one thousand dollars to each. This statement has already been published in the *Annals*. The commencement oration of Mr. W. L.

Bird, included in the report, affords gratifying evidence of the culture acquired in the college training.

The main central building of the institution has been completed, and the adjoining Kendall estate, consisting of eighty-one acres, has been added to its grounds.

The report contains the proceedings of the board of directors in memory of the late Hon. Amos Kendall, the founder of the institution, and of the late Hon. B. B. French, one of its most active directors.

The report of the *Alabama Institution*, like the Louisiana and Texas institutions, comments upon the small number of pupils at school in comparison with the number of deaf-mutes in the State. Dr. Johnson attributes this to the desire of parents to keep their children at home to work for them. He also complains of the failure of the pupils to come to the institution at the beginning of the term, and urges the board "to make it a rule, not to be varied from, except for good and sufficient reason, to refuse admission to all who fail to be in attendance by the close of the second week of the term."

Dr. Taylor, one of the directors who with Dr. Johnson attended the Indianapolis convention and visited several northern institutions, gives a brief account of their observations, and some practical suggestions of value to the Alabama institution. Appended to the report, is Dr. P. G. Gillett's admirable paper on the organization of an institution for the deaf and dumb, which was read at the Indianapolis convention.

In the *Minnesota Institution*, Mr. J. M. Pratt, a recent graduate of Williams College, has succeeded Mr. Geo. W. Chase, as a teacher. Mr. Chase resigned on account of feeble health. During the eight years that the institution has been existence, there has not been a single death. Mr. Noyes and the board of directors strongly urge the completion of the south wing, to furnish room needed for the health of the pupils now in the institution, and for the accommodation of new pupils

who have made application for admission. The grounds are receiving improvement under the direction of a competent landscape artist.

The *Institution for Improved Instruction*, New York, has been re-organized, by action of the legislature, and is now placed in the same relation to the government of the State as that of the New York Institution. Its situation, too, has been changed from Fourteenth street to the junction of Broadway and Seventh avenue, between Forty-fourth and Forty-fifth streets, where it occupies larger and more convenient buildings than before. This, however, is not regarded as its permanent home; a grant of land having been received from the city authorities, it is proposed to erect as soon as possible a suitable structure, adequate for the future wants of the institution.

Mr. Rising's report discusses the subject of articulation. After quoting from the reports of other institutions some remarks upon the beauty and power of the sign-language, he says:

"From elaborate treatises, of which the above are specimens, the reader might infer, and very justly would infer, that the end and aim of deaf and dumb institutions is to render the mute an accomplished sign-maker, proficient in that beautiful language so far surpassing the dry, passionless words which hearing mortals absurdly prefer. It is true that there is beauty and grace and force in signs when understood, as when accompanied by the voice, or when used by mutes and their teachers. But the hard, undeniable fact is that hearing and speaking people do not understand these beautiful signs, and will not learn them; they will not even learn how to spell with their fingers, and mutes so generally find it irksome and difficult to communicate even with their parents, that home loses its distinctive charms; they feel like exiles there, the institution has become a home, their only native place.

"The question then presses itself upon thinking men, why teach this foreign language of signs at all? Why not teach English idioms directly, and not compel him to a translation in order to a comprehension of their correct use? * * * Words and phrases are the signs used by society, hence these should be persistently taught the mute. But signs are used as a means, it is alleged, 'as a test of his comprehension of words.' Therefore it would seem to follow that the more elaborate and extended the means, the more perfect would be the mute's mastery of language. The facts, unfortunately, are precisely the reverse of this. Those pupils who have been trained to spell words and phrases with their fingers, and to write them, rarely using signs, are the only ones who have ever acquired a fair knowledge of language. The accomplished, graceful sign-makers are notoriously incapable of correct composition even upon familiar subjects, and the printed page is to them a hidden mystery. The ablest instructors of the deaf and dumb now freely admit that, after fifty years of trial in this country, the sign system has been found wanting. It has failed to accomplish the ends desired, and the demands of parents and guardians for better methods can not longer be disregarded. * * * *

"By the articulate method the child is first taught to speak, then, as soon as he can pronounce short syllables, he is given a complete sentence, as 'What is that?' With this phrase he can ask the names of all objects about him, or the names of what he observes in pictures shown him. Other phrases, as 'What is the color, shape, etc., of this?' 'What is he doing?' will give him qualities and actions. In place of conventional and arbitrary signs for the explanation of written characters, or words, this system exhibits either the object, or a drawing or picture of it; and, as in the case of hearing children, language is made to interpret language as early and completely as possible. Instead of making the sign for walking by apparently stepping

with the hands—walk; in place of spreading out two fingers like legs and placing the ends on the palm of the other hand—stand. Let the complete phrase, or sentence, be written and spoken by him over and over again, until it has become ineffaceably impressed upon his memory. This system of object-teaching is not necessarily adapted only to those mutes who can be taught speech. It is probable that only about half of the so-called deaf and dumb can be taught articulation. This half includes the semi-mutes, the semi-deaf, and bright congenital mutes, not too far advanced in years. The remaining mutes, by substituting the manual alphabet for speech, can, it is believed, acquire the ability to write and spell, and hence to understand English idioms, by this method of word and phrase building, interpreted by objects, pictures and actions; and only when other resources fail, by natural gestures; never by arbitrary, methodical signs.”

The report of Dr. Blumenthal, the president of the institution, sketches the history of the school from its beginning to the present time, and claims that it was the first in this country to introduce the “improved system” of instruction.

In an appendix to the report are given directions for the elementary instruction of deaf-mute children at home, according to the method of articulation.

The *Clarke Institution*, Northampton, Mass., has purchased two estates “beautifully located on Round Hill, overlooking the valley of the Connecticut, with Mounts Tom and Holyoke to the south, and Amherst and Hadley to the east; Northampton lies directly below, and the Greenfield Hills are on the north side,—a rare panorama.” Two dwelling-houses standing on the estates, one formerly used for a boarding-school, have been enlarged, altered and repaired, and a third building is in process of erection.

Of instruction by means of articulation, Mr. Hubbard, the president of the board, says: "The result at Northampton has been as favorable as was expected, and each year becomes less of an experiment. * *

"Teaching by articulation is at present more difficult than by signs; greater enthusiasm is required, and long continued and constant care, combined with unremitted attention. If these are wanting, the system will fail, but this is the only method which will make the language of home the mother tongue of the deaf; without it they must ever remain as foreigners even among their own kindred."

Mr. Hubbard makes the following statement concerning the success of instruction by means of articulation in the case of his daughter, who lost her hearing in 1862, at the age of four years:

"For many months her articulation was very feeble and indistinct, but it gradually improved as she regained her strength. She has been the object of constant care and watchfulness, and has received instruction from a most excellent and devoted friend and governess. She now speaks as rapidly as other children, is readily understood by her family and friends, and with some difficulty by strangers. She went to Germany last May, and for several weeks attended an ordinary day-school, receiving a few lessons in articulation from a teacher in the deaf school at Hildesheim near Hanover, who did not understand a word of English. She now reads and writes German, and converses in that language with her playmates and associates; and there is no doubt that she will soon speak it as well as English."

Mr. Hubbard last year visited several European articulating schools, but as it was vacation in most of them, he was unable to gain as much information as he desired. At the Jewish institution in Vienna, of which Mr. Deutsch is principal, "the attainments of the few scholars who were present when the school was visited compared favorably with those of the class

at Northampton, which has been the same length of time under instruction." At a private school in the same city, which has but six pupils, who receive the constant care of Mr. Siegbach and his wife, "only three of the scholars were seen, but their articulation was excellent and their general knowledge remarkable for the few months they had been under instruction. The voices of all the pupils at these two schools were pleasant, and had less of the peculiar unmodulated tone than most of ours have.

"The school at Hildesheim, near Hanover, is under the care of older men than those in Vienna. Articulation is the method of instruction, but there was little of interest in the school and it was inferior to many in this country. Herr Hildebrand, of the school at Dresden, says that the result of the German system is not wholly satisfactory in most schools, because the teachers have too many scholars and cannot give the requisite attention to each. Most teachers have classes of sixteen, and though they can give them instruction together, they cannot spend sufficient time upon their articulation. He says further that, to insure success in an articulating school, it should be kept small and have a sufficient number of teachers to give personal instruction to each pupil.

"The Jews' Home and School for the Deaf in London was founded by the Baroness Rothschild in 1867, and is the only school in Great Britain where articulation is taught as it should be. It was originally intended for Jews only, but others are now admitted. Mr. Van Praag, the sole teacher, was educated by Dr. Hirsch, of Rotterdam. He believes that the deaf should associate as much as possible with those who hear, and therefore has only day-scholars. Children from a distance board in families of their own position in life and religious persuasion, and the pupils prepare their lessons at their own homes, and it is particularly requested that their parents or guardians assist the

children in their studies. The course of instruction commences with children six years of age and continues eight years. Mr. Van Praag says that Dr. Hirsch's experience, after a lifetime spent in the instruction of the deaf, is, that ninety-nine out of every hundred may be taught to speak; illustrating what a deaf-mute once said to him, 'Nature made me deaf, but man kept me dumb.' Except in case of malformation of the vocal organs, deaf and dumb people do not exist, and mutism is the result solely of deafness. The London school is small but appeared flourishing; the children read with ease from Mr. Van Praag's lips, though he wore a mustache and heavy beard, and understood the questions of a stranger without difficulty. It is regarded by the other schools as an experiment, but its success is assured, if the means necessary for its support are provided."

Miss Rogers' report is chiefly devoted to a detailed account of the progress of the several classes and of individual pupils. We notice in the list of new pupils the name of Miss Laura C. Redden, well-known to the readers of recent periodical literature as "Howard Glyndon." Her case is described as follows:

"She lost hearing at ten years of age from brain fever, and entered here only to learn to read the lips and to gain a better control of the voice. After becoming deaf she was not encouraged to continue to speak either at home or in the Missouri Institution which she attended for two or three years. So great did her disinclination to speak become that, except with a few intimate friends, she communicated wholly by writing. On going abroad in 1861 she found speech would so much facilitate her communication with others that she persevered in its use, but had much difficulty in making herself understood. After two months' instruction here her friends were very much surprised at the control of voice she had gained, and the consequent improvement in her speech. She is no longer

obliged to resort to writing in communicating with others. Her progress in lip-reading has been fair."

The *Arkansas Institute* presents its first biennial report; principal, Elmore P. Caruthers, M. A.; instructor, Ralph H. Atwood; both formerly instructors in the Ohio Institution.

Mr. Caruthers, in his report, gives a sketch of the history of the institution, including two attempts, one in 1850 and the other in 1860, to establish a school for deaf-mutes in Arkansas. The institution seems now to be established upon a secure and permanent basis. The principal and the board of directors unite in urging the extension of the building, to meet the growing wants of the institution.

The *Maryland Institution* has a new principal, Charles W. Ely, M. A., taking the place of Mr. W. D. Cooke, and three new teachers, Messrs. T. W. Berry, Z. F. Westervelt, and C. H. Hill, who succeed Messrs. J. A. Cooke and C. L. Cooke. Messrs. Ely and Westervelt were formerly instructors in the Ohio Institution. Mr. Berry was an instructor in the New York Institution and Mr. Hill in the North Carolina Institution.

A new building, well-adapted to the wants of the institution, is now in process of erection; the lithograph which accompanies the report shows that when completed it will present a handsome appearance.

Mr. Ely, in his report, explains the method of instruction most generally followed in this country. Systematic instruction in articulation has not yet been given, except in the case of a few pupils who already possessed in a good degree the power of speech. It is intended however to introduce it at an early date.

The *Nebraska Institute*, Mr. W. M. French, principal, presents its first annual report, printed by the pupils of the institution. The appropriations received from the State have been small, but by economy and self-sacrifice

on the part of the officers, they have sufficed to carry on the institution. A temporary building is occupied thus far.

The *West Virginia Institution*, H. H. Hollister, principal, also presents its first annual report.

A building worth \$20,000, formerly known as the "Romney Classical Institute," was given to the institution by the citizens of Romney, and having received some necessary alterations and repairs, is now occupied by the school. Further additions are needed to meet the wants of the institution. Appended to the report is an address delivered by Col. White, secretary of the board of regents, at the formal opening of the institution, Dec. 15, 1870.

The *Halifax Institution* has a new teacher, Mr. P. W. Downing, formerly of the Liverpool Institution.

Mr. Hutton devotes a portion of his report to a description of the Indianapolis Convention, at which he was the only instructor of the deaf and dumb present from the Dominion of Canada. He also visited several of the institutions for the deaf and dumb in the United States, and was much impressed by the liberal provision made by the State governments for the education of their deaf-mute children. As it was vacation in most of these institutions, he did not see the classes in operation.

The report contains a fitting tribute to the memory of that earnest and devoted laborer in the cause of deaf-mute instruction, the late Mr. George Hutton, father of the principal of the Halifax institution.

HOW TO GET A PRINCIPAL.

The Harpers have just published a small duodecimo volume with the bizarre title of "The Bazar Book of Decorum." As the book is to be bought and read by Americans—if bought and read at all—the first chapter is devoted to proving "the peculiar necessity for Americans to cultivate politeness;" and, to add attractiveness to the study, some space is given to setting forth the advantages, that is the money value, of politeness, as illustrated by the illustrious Duke of Marlborough.

The author seems to think that the average American regards rudeness as the essential principle of liberty and equality; and that while no words are more frequently on his lips than the good old adage, "Handsone is that handsome does," he entirely neglects to cultivate that kind of beauty.

There are several chapters on personal cleanliness, some on gracefulness, others on dress, etiquette of the table, etiquette of the parlor, cards and visits, balls, parties and church, introductions, marriages and funerals. If one wishes to call on the President, chapter XIX contains minute directions how to do it: the same chapter tells how to address, and even how to write, letters of introduction. But as there is nothing perfect in this world, either in nature or in art, so we can hardly expect any book to be complete. In the nature of the case something will be omitted, either because the knowledge of the writer is imperfect, or because his judgment is not equal to estimating everything at its real value, or because he has not been placed in circumstances to discover what is patent to others more favorably or differently situated.

It is very evident the author of the "Bazar Book of Decorum" is not, and never has been, a teacher of the deaf and dumb, or a director of an institution for that unfortunate class. If he had ever been so situated, and had made a proper use of his advantages, he would have learned the best, most decorous, and politest way

to get a principal. He would have been able, and would not have failed, to tell us how to do it handsomely. He would have devoted at least a chapter, and that not a short one, to the discussion of this important question, and its correlative, "How to get the situation of principal." This he most certainly would have done while not leaving the other undone. He tells us how to write a letter of introduction, how to present, and how to read it; but this is as near as he comes to it. Nor is he the only one of all the writers of books of this kind who has committed this sin of omission.

These gentlemen claim doubtless to be *au fait* in all the requirements of polite life, equal to every emergency in which a gentleman or lady can be placed.

They direct us in what terms to request the honor of a lady's hand for the next dance, between what hours to call, and how to carry our hats when we do. They give us model letters suited to all the wants, they tell us, of polite life, letters of friendship, of love, of proposals of marriage, of rejection, of condolence, of congratulation and of introduction; but not one offering the position of principal of an institution for the deaf and dumb.

Now these authors must think that no gentleman ever did, or ever will, put himself in a position where he will be called on to write such a letter; or else they, having never been in that situation themselves, underestimate its importance.

New institutions for the deaf and dumb are constantly springing up for which principals must be obtained, and those presiding over the old institutions must sooner or later be removed by one or other of the casualties to which principals are particularly liable.

How important is it then that the properest method of supplying the vacancies should be discovered and adopted.

The good people of the State of Alaska, we will suppose, have just established an institution for the deaf

and dumb. The legislature has made a liberal appropriation and appointed a board of directors who have erected the necessary buildings in the quiet little town of Seward, about twenty miles from the nearest railroad. The question now forces itself upon them: "When and how shall we get a principal?"

Naturally enough they turn their eyes to some of the older institutions, and address letters to each of their venerable principals requesting them to recommend a gentleman of education, experience, and character, every way qualified to take charge of the new school in Alaska, and at once place it on a level with, if not above, all the other institutions in the country.

By course of mail replies are received to these letters, each presenting the name of "just the man for the place," who, if addressed on the subject, will be willing to take the matter into serious consideration.

The directors are as much perplexed as ever: How can they choose between Mr. Smith of Hartford, and Professor Jones of New York—or Mr. Brown of Philadelphia and Mr. White of Ohio? They can form no relative estimate of the men from their names; Jones weighs as much as Smith, and White is as heavy as Brown. According to the letters each one is the man for the place; they could be satisfied with either one of them "were the other dear charmer away."

At last one of the directors, a merchant who has just secured the services of an errand-boy, proposes to solve the difficulty by inviting all these gentlemen, whom he chooses to call "*applicants*," though not one of them has written a word to him on the subject, to meet the board on some appointed day at Seward, when it will be easy to select their principal as he selected his errand-boy. A letter conveying this invitation is addressed to each of the gentlemen, somewhat as follows:

"DEAR SIR:

"You have been highly recommended to the board of directors as a suitable person to take charge of this

institution, and it will afford us great pleasure to see you at our meeting on the — day of —

Respectfully,

Pres. Bd. Directors."

Now, as Mrs. Bardell placed confidence in single gentlemen because the late Mr. Bardell was a single gentleman when he won her young affections, so teachers of the deaf and dumb, having learned by frequent intercourse with the directors of their own institutions to admire and trust them, extend the same admiration and trust to all of the class. So Jones reads his letter, and, unaware that half a dozen others are at the same time reading its duplicate, comments on it thus: "Short and non-committal."—For Jones is an educated man, can see the force of words, and knows that letter contains no offer of any kind.

But now comes in the beautiful Bardell confidence. "Surely they would not put me to the expense of a journey to their out-of-the-way town without intending to make me the offer."

So comment and reason each of the others, and, so reasoning, they all start for Seward, Professor Jones taking his wife and child along to avoid the expense of returning for them. On the appointed day, they all meet at Seward and the board of directors of the Alaska Institution for the Deaf and Dumb have the pleasure of seeing six highly mortified, not to say indignant gentlemen.

Professor Jones thinks he has been swindled, Brown has no hesitation in calling it a fraud, and Smith speaks of it as a deception.

It is clearly a case of misplaced confidence, and these poor gentlemen, literally as well as metaphorically poor—for who ever heard of a rich teacher of the deaf and dumb?—go home wiser and less trustful men, resolved never again to be taken in by such a letter.

Now as there is no State of Alaska, no town of Seward, no Alaska Institution for the Deaf and Dumb, and, of course, no directors thereof, the above must

be an imaginary sketch to illustrate a possible evil; but is it not one of those possibilities against which it is well to provide? Let the author of the "Bazar Book of Decorum" take the subject in hand, and lay down some definite and specific rules for the directors of an institution to follow in their efforts to get a principal.

MISCELLANEOUS.

BY THE EDITOR.

The Iowa Institution.—The Council Bluffs *Nonpareil* of June 23rd contains an account of the dedication of the new chapel of this institution the Sunday previous. An interesting discourse was delivered by Mr. Talbot, who took for his text Ps. CXXVI. 3: "The Lord hath done good things us, whereof we are glad." He sketched the history of the good things which had been done for the deaf and dumb in the means provided for their education, especially in this country, and urged upon the pupils of the institution their duty of gratitude.

The Silent World.—The three numbers of this monthly periodical which have thus far appeared justify us in speaking of it in very high terms. Edited by graduates of our institutions and students of the college at Washington, and receiving its contributions largely from deaf-mutes, it bears striking testimony to the high degree of culture which some persons of this class have attained. Though intended primarily for the deaf and dumb and containing items of news and other matter especially adapted to them, it reaches so high a standard of literary excellence and has articles of such general interest, that it bids fair to take rank with the best newspapers and magazines of the day. The paper and typography are equalled by very few publications in this country, and the appearance of the periodical is in every way pleasing.

AMERICAN ANNALS
OF THE
DEAF AND DUMB,

EDITED BY

EDWARD A. FAY,

UNDER THE DIRECTION OF

E. M. GALLAUDET, OF WASHINGTON, E. C. STONE, OF
CONNECTICUT, I. L. PEET, OF NEW YORK,
W. J. PALMER, OF ONTARIO, AND
THOMAS MACINTIRE, OF IN-
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CONTENTS.

NUMBER I.

	PAGE.
Visible Speech as a means of Communicating Articulation to Deaf-Mutes, ... By A. GRAHAM BELL,	1
The Instruction of the Deaf and Dumb, ... By B. D. PETTENGILL,	21
Shall We Abandon the English Order? By E. G. VALENTINE, B. A.,	33
A Few Words on Text-Books, etc., ... By WM. H. LATHAM, M. A.,	47
MISCELLANEOUS: The Tabular Statement of the Institutions; The Michigan Institution; Death of Mr. King; The Hull Homicide; The Census of 1870; The Census of 1840; The Next Convention; The American Asylum Thirty-Five Years Ago,	
By the Editor,	58

NUMBER II.

The Psychological Status and Criminal Responsibility of the Totally Uneducated Deaf and Dumb, ... By ISAAC LEWIS PEET, M. A.,	65
The Music Essence, ... By FITZ HUGH LUDLOW,	94
The Æsthetic Element in Public Buildings,	
By EGBERT L. BANGS, M. A.,	126
MISCELLANEOUS: The Proportion of Semi-Mutes; The Co-education of the Deaf and Dumb and the Blind; Deaf-Mute Text-Books for Chinese Scholars; Pretended Restoration of Hearing; The Manual Alphabet in the Hour of Death, ... By the Editor,	129

NUMBER III.

Foundation Work, ... By BENJAMIN TALBOT, M. A.,	133
The Kentucky Institution and Methodical Signs,	
By CHARLES H. TALBOT, M. A.,	137
"Text-Books" and "Mutisms," By JOHN R. BURNET, M. A.,	157
INSTITUTION REPORTS: Pennsylvania; Kentucky; Ohio; Virginia; Indiana; North Carolina; Illinois; Georgia; Louisiana; Wisconsin; Iowa; Mississippi; Texas; Columbia; Alabama; California; Minnesota; New York Improved Instruction; Clarke; Maryland; Boston; West Virginia; Halifax; Ontario; Montreal Protestant, ... By the Editor,	162
MISCELLANEOUS: The Deaf and Dumb in Parliament; The Manchester Society for the Benefit of the Adult Deaf and Dumb; The Former Pupils of the Yorkshire Institution. By the Editor,	192

NUMBER IV.

	PAGE.
THE COMBINED METHOD OF INSTRUCTION FOR THE DEAF AND DUMB, By O. F. KRUSE,	197
Preface	198
Introduction	200
1. What are the forms or realities which distinguish the French and German methods of instruction?	203
2. What are the principles of the French and German methods, re- spectively?	208
3. Is articulation really adapted to take the place of the sign-lan- guage in the instruction of the deaf and dumb?	213
4. What means have we within our reach that for the deaf and dumb shall perform the same office, in some degree, that spoken lan- guage does for hearing children?	219
5. Has the sign-language only the limited value of articulation, or does its influence, in respect to the acquisition of language, ex- tend still farther?	221
6. Do all the advocates or adherents of the German method really believe that articulation affords a means of instruction so in- fallible as to make the sign-language wholly superfluous?	223
7. Does the sign-language, as such, deserve to be cultivated or not?	228
8. What is to be thought of the objection of those who maintain that instead of allowing the sign-language to intervene we should attach the expression of the idea directly to the word?	231
9. What is to be thought of the opinion of those who maintain that the sign-language is a hindrance to the pupil in the develop- ment of spoken language?	233
10. When, and to what extent, does the deaf-mute pupil think in words?	237
11. What form must be made the unconditional basis of deaf-mute instruction?	240
12. What is the true fundamental and permanent form of instruction?	241
13. Should the word be received by the pupil in the form of articu- lation or of writing?	244
14. In what relation does articulation stand to writing and the course of instruction in general?	253
15. What, finally, is the true, natural, and successful method of teaching the deaf and dumb, or in what does the real essence of the German method consist?	255

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VISIBLE SPEECH AS A MEANS OF COMMUNICATING
ARTICULATION TO DEAF-MUTES.

BY A. GRAHAM BELL, BOSTON, MASS.

THE system of "Visible Speech" was invented by my father, Mr. A. Melville Bell, professor of vocal physiology ; and it constitutes a new species of phonetic writing, based, not upon sounds, but upon the actions of the vocal organs in producing them.

The plan originated fully a quarter of a century ago ; and the germ of the invention was published in the first edition of "The Principles of Speech," (1849.)

The idea conceived was that of representing the sounds of all languages by means of one alphabet, the characters of which should reveal to the eye the organic formation of the sounds. Although my father's professional duties as a corrector of the defects of utterance directly favored the study of the organic formation of sounds, still, the difficulties in the way of carrying out the idea were so great that it was not until 1864 that the plan took definite shape. Then, indeed, a scheme of letters was produced which claimed to be so perfect as to represent *any sound the human mouth could utter*.

Linguists and men of science were invited to test the truth of this assertion. The invitation was accepted ;

and for three years the most searching tests were applied in public and in private. The following facts were abundantly proved :

1st. That the sounds of any language could be written by means of Visible Speech ; and,

2d. That a person unacquainted with a language could pronounce it at sight, with vernacular correctness, while deducing his pronunciation solely from the physiological symbols.

An account of a few of the earlier experiments was published in a pamphlet entitled "Visible Speech ; a New Fact Demonstrated," (1864.)

To convey an idea of the nature of these experiments, I quote a description of one from a letter to the *Reader*, by Mr. A. J. Ellis, the distinguished author of the "Essentials of Phonetics." Mr. Ellis says :

"The mode of procedure was as follows: Mr. Bell sent his two sons, who were to read the writing, out of the room—it is interesting to know that the elder, who read all the words in this case, had only had five weeks' instruction in the use of the alphabet—and I dictated slowly and distinctly the sounds which I wished to be written.

"These consisted of a few words in Latin, pronounced first as at Eton, then as in Italy, and then according to some theoretical notions of how the Latins might have uttered them. Then came some English provincialisms and affected pronunciations ; the words 'how odd' being given in several distinct ways.

"Suddenly German provincialisms were introduced. Then discriminations of sounds often confused: *ees*, *is'*, (Polish;) *eesh*, *ich*, (German;) *ich*, (Dutch;) *ich*, (Swiss;) *oui*, *oui*, (French;) *we*, (English;) *wie*, (German;) *vie*, (French.) Then some Arabic, some Cockney-English, with an introduced Arabic guttural, some mispronounced Spanish, and a variety of shades of vowels and diphthongs.

* * * * The result was perfectly satisfactory ; that is, Mr. Bell wrote down my queer and purposely-exaggerated pronunciations and mispronunciations, and delicate distinctions, in such a manner that his sons, not having heard them, so uttered them as to surprise me by the extremely correct echo of my own voice. * * Accent, tone, drawl, brevity, indistinctness, were all reproduced with surprising accuracy. Being on the watch, I could, as it were, trace the alphabet in the lips of the readers. I think, then, that Mr. Bell is justified in the somewhat bold title which he has assumed for his mode of writing—"Visible Speech.'"

This examination of the capabilities of the system, which may fairly be called an *experimentum crucis*, was made before the symbols of Visible Speech had been exhibited to Mr. Ellis. As he is, perhaps, the best living authority on the subject of phonetics, it may be interesting to know the opinion he formed of the *theoretical details* of the system when these were presented to him. I quote from another letter of his.

After referring to his own works, those of Amman, De Kempelen, Johannes Müller, K. M. Rapp, C. R. Lepsius, E. Brücke, S. S. Haldeman, Max Müller, and "a host of other works of more or less pretensions and value," (the treatises enumerated containing perhaps "a complete account of the present state of phonetical knowledge,") he says:

"Now, it is with this full and distinct recollection of works which I have not only read, but studied, many of them with great care and attention, that I feel called upon to declare that until Mr. Melville Bell unfolded to me his careful, elaborate, yet simple and complete system, I had no knowledge of alphabets as a science. Much had been done. * * * But alphabets as a science—and I have looked for it far and wide—did not exist. We did not know what elementary sounds or modifications of sound should be expressed, and the art of expressing such as had been pretty generally received was in a state of the greatest confusion."

USES OF THE INVENTION.

Among the uses of the system most interesting to the general reader, I may note:

1st. *The correction of stammering and other defects of speech; and the communication of articulation to deaf-mutes, by showing the proper position of the mouth in forming sounds.*

2d. *The teaching of illiterate adults in all countries to read their own language from books printed in the system.*

The imperfectly phonetic character of all previous alphabets has been the cause of the great length of time required to master the art of reading. Had each sound an invariable representative, and each letter an invariable sound, a pupil would commence to read whenever the

powers of the letters had been acquired. Hence, the hope is indulged, that, when works have been printed in the Visible Speech typography, illiterate adults may be enabled to read such books *in a few days*.

3d. *The formation of a system of raised letters, of universal applicability, for the use of the blind.*

This is a development of the stenographic alphabet of Visible Speech. The words are capable of contraction according to the rules of stenography, so that works printed in this system need not be nearly so bulky as those at present used by the blind.

4th. *The writing of hitherto unwritten tongues for missionary and other purposes.*

No instance of failure has yet occurred in the representation of the most difficult sounds, taken from over fifty languages.

5th. To the comparative philologist Visible Speech is invaluable, as a means whereby fast-disappearing dialects may be preserved for study and comparison, and the affinities of words be exhibited to the eye.

It must not be supposed that this list exhausts the applications of the system. It has been adapted to the wants of stenographic reporters in all countries, to the telegraphing of all languages without translation, and other new uses are constantly suggested.

The applications of the system were early seen to be so many and important that the British press was loud in its support of the inventor in his appeal to the English government for aid in publishing and applying his system. This appeal was unsuccessful; and so, in 1867, Professor Bell produced the inaugural edition of the system, entitled "Visible Speech; the Science of Universal Alphabetics."

APPLICATION TO DEAF-MUTES.

In 1869, the first attempt was made to communicate a knowledge of the symbols to deaf-mutes. This experi-

ment was tried at a private establishment in South Kensington, England, conducted by Miss Hull.

No difficulty was found in giving the idea of the symbols to four children, the oldest about twelve and the youngest about seven years of age, and nearly all the elementary sounds of English were obtained from them *in a few days*.

It was at once evident that Visible Speech would be an instrument of great power in the hands of teachers of the deaf and dumb; and it became an absorbing problem how best to use it. Becoming, myself, intensely interested in the subject, I wrote to Mr. Peet, of New York, wishing to experiment with the symbols in the institution for deaf-mutes there. This was impossible at that time; but Mr. Peet brought the subject before the notice of American teachers at the recent Indianapolis Convention.

Since the experiment in South Kensington, a theoretical plan of instruction has been devised, but no opportunity was found of applying it till the spring of the present year.

In the meantime, Miss Hull, though laboring under the disadvantage of having no definite plan to work by, has been experimenting further with the symbols in her school. In a letter just received from her, referring to a visit from Miss Rogers, the principal of the Clarke Institution, she says: "My school will be the representative in England of your father's system applied to the deaf, which I, too, believe to be the true philosophical foundation for instruction in articulation."

Comparing the results obtained by her with those produced by Mr. Van Praagh, in London, working upon the German method, she says: "I certainly think our pupils spoke much plainer and more readily after six months' instruction than his did after twelve; but of course I am a prejudiced judge in that matter. I look to Visible Speech to obtain much greater and more certain results than any yet produced."

The lectures given by the inventor in the various towns of the United States during the last three years drew the attention of educationists to the subject; and mainly through the exertions of the late Hon. Dexter S. King, it was resolved that the system should be experimented with in the Boston school for deaf-mutes. The committee of that school invited me to visit Boston for the purpose of instructing the teachers in the use of the symbols. During the month of April, 1871, all the teachers were close students of the system. By the 1st of May, they had acquired sufficient knowledge of the symbols to conduct experiments under my superintendence; and by the 1st of June I was enabled to relinquish the conduct of the experiment into the hands of Miss Fuller, the principal of the school.

On the 13th of June, a public exhibition was given of the condition of the school, and it was shown that the very youngest children had comprehended the meaning of the symbols. Taking the school as a whole, it was found that, during the month of May, over three hundred English sounds, which the pupils had formerly failed to utter by imitation, had been obtained by means of Visible Speech. Class illustration was given of the pronunciation of syllables with differences of accent and quantity, and individual illustration of the *perfect utterance* of words and sentences. Adult deaf-mutes were present who had acquired all the sounds of the English language in ten lessons, and who could articulate a large number of words with absolute correctness. One pupil of the school, to whom special instructions had been given in the principles of elocution, read Longfellow's "Psalm of Life," from elocutionary marks, with natural and expressive inflections of the voice.

The following letters have recently been received concerning the experiment in the Boston school:

From the Committee of the Boston School for Deaf-Mutes.

BOSTON, Nov. 1, 1871.

A. GRAHAM BELL, Esq.:

DEAR SIR: The system of Visible Speech, invented by your father, and so successfully introduced by you into the Boston school for deaf-mutes, has given the teachers an instrument of incalculable value in teaching deaf-mutes (congenital as well as others) to articulate clearly and correctly.

It has been heartily adopted as the system of the school, and the surprising results exhibited by the pupils at the close of your brief course of instruction are increasingly apparent every day.

Trusting you may be as successful in your future labors as in those we have witnessed, we remain, very cordially, your friends,
IRA ALLEN, *Chairman.*
GEO. F. BIGELOW.

From the Principal of the Boston School for Deaf-Mutes.

SCHOOL FOR DEAF-MUTES,

BOSTON, Nov. 4, 1871.

A. GRAHAM BELL, Esq.:

DEAR SIR: In compliance with your request, I am happy to give you my opinion regarding the value of Visible Speech in teaching articulation to deaf-mutes.

I can say, with confidence, that I have found it of the greatest assistance. The consonants *b*, *d*, and *g*, which are the most difficult to obtain by imitation, are, by means of the symbols, produced with great ease and accuracy; and the consonant combinations, such as *ct*, *ks*, *nd*, etc., which were often very faulty, are, by this system, acquired perfectly.

In teaching vowels it is of especial value. The Visible Speech symbols make the child conscious of the correct positions of the mouth for producing these sounds. Hitherto such elements have been our greatest difficulties. I have been able to correct in several cases very imperfect vowel sounds which had baffled all attempts under the old system of imitation.

Although I have had but little experience in the use of Visible Speech, I am quite convinced that if we had begun our work with a full knowledge of this system, we should have been spared a great amount of difficult and often discouraging labor, and produced much better results.

Yours, respectfully,

SARAH FULLER.

From the Superintendent of Public Schools in Boston.

CITY OF BOSTON, DEPARTMENT OF PUBLIC INSTRUCTION,

SUPERINTENDENT'S OFFICE, CITY HALL, October 7, 1871.

A. GRAHAM BELL, Esq.:

MY DEAR SIR: I congratulate you most cordially on the success of your experiment in the application of the science of Visible Speech, which was invented and developed by your father, to the

instruction of the pupils in our Boston deaf-mute school. Heretofore, instruction of deaf-mutes in artificial articulation has been wholly imitative and empirical, and although the system is extensively employed, it has produced useful results only at the expense of incredible labor and patience on the part of both teachers and pupils.

You have, by your experiment in our school, proved the practicability of producing in congenital deaf-mutes *perfect* articulation, with vastly less labor than has been required to produce only imperfect articulation.

What is still more wonderful, if possible, you have succeeded in enabling deaf-mute pupils to modulate the voice, by giving a higher and lower pitch, and the upward and downward and circumflex inflections.

What you have done in the short time you have been engaged in our school has convinced me that the science of Visible Speech is to become a powerful and an indispensable instrumentality in the instruction of deaf-mutes.

I know of no greater step of progress, in this speciality of education, than this you have introduced, since the days of the Abbé de l'Épée and Samuel Heinicke.

Very truly, yours,

JOHN D. PHILBRICK.

I am at present engaged in conducting experiments with Visible Speech privately in Boston. An account of the results obtained will be presented to the readers of the *Annals* in due time.

The system is now undergoing experiment in the Northampton Institution for Deaf-Mutes, and it will be introduced into the American Asylum, Hartford, in May, 1872.

POPULAR ERRORS CONCERNING THE FUNCTIONS OF THE NEW ALPHABET.

I have attempted, in the preceding pages, to convey an idea of the nature and uses of Visible Speech ; to give an outline of the history of the invention, and to state the results of its introduction into the Boston school.

I shall now supplement this by a brief description of the symbols themselves, the mode of communicating them to deaf-mutes, and the plan of instruction so far as developed. But before doing this, I think it right to correct any misapprehensions that may arise concerning the functions of the new alphabet.

1st. In regard to general applications.

There is no intention of superseding existing alphabets by the new letters. The system must, therefore, not be confounded with any phonetic movement, such as that at present existing in England. It is intended solely for international and scientific purposes, and as a key to other alphabets. In the words of Prof. de Morgan, it forms "a sound-bridge from language to language, from no speech to speech."

2d. In its application to deaf-mutes.

(a.) The system does not interfere with any existing plan of education. Visible Speech takes *no part* in the contest between articulation, on the one hand, and signs and manual alphabets on the other. In presenting his system for adoption, all that the inventor means to say is this: "Here is a means by which you can obtain perfect articulation from deaf-mutes; *make what use of it you choose.*" He places the *tool* in the hands of teachers, with general directions how to use it.

(b.) Visible Speech is not *necessarily* associated with lip-reading. There is no doubt that, in schools where lip-reading is employed, the symbols will materially assist the pupils by showing them *what to look for* in the mouths of hearing persons, but this is apart from its greater sphere of usefulness as a means of communicating articulation.

(c.) Visible Speech does not profess to teach the deaf to *modulate their voices*; it deals with articulation pure and simple.

There is no doubt that, by means of the symbols, the quality or "timbre" of the voice may be influenced; and future experiments will show how far a harsh and disagreeable voice may be made soft and pleasing by means of them.

Deaf-mutes may be taught to modulate their voices, and to read with expression, by means of an (at present) unpublished development of Visible Speech, which aims at representing pictorially the changes of the voice in regard to force, duration, and pitch. This system consti-

tutes an elocutionary, and, in its fullest development, a musical notation, accomplishing for the throat what Visible Speech does for the mouth.

We all know that our deaf-mute pupils give on the play-ground and elsewhere *perfectly natural inflections*. They laugh and cry like other children. The problem is to make them *conscious* of the movements of their voices. Experiments in the Boston school have proved that this can be done.

MODE OF COMMUNICATING VISIBLE SPEECH TO DEAF-MUTES.

The elementary symbols are pictorial of parts of the mouth and of their modes of action. As the various organs of speech are disposed in forming any particular sound, the corresponding symbols are put together to build up a compound character indicative of the position of the mouth. This compound character most truly represents the sound intended, because no person can put his mouth into the position indicated without producing it.

The symbols have been successfully explained to deaf-mutes in the following manner: The outline of a face turned toward the right is drawn upon the blackboard, (see illustration,) and a representation of the inside of the mouth is added. The pupil's attention is directed to the various parts of the diagram, and he shows his appreciation by touching the corresponding portions of his own face or mouth. When the teacher points to the arrow-head, a motion of the hand is made to suggest that it means "air coming out of the mouth."

Those portions of the face represented in the illustration by dotted lines are then erased from the board, and attention is directed to the broken remains of the diagram. When the teacher points to the fragmentary nose, lip, or tongue, etc., the pupil touches his own nose, lip, or tongue.

It will be observed that these disjointed portions of the diagram are the *Visible Speech symbols for the corresponding parts of the mouth*. The symbol for "lip" is the outline

ILLUSTRATIONS OF VISIBLE SPEECH.

Fig. 1

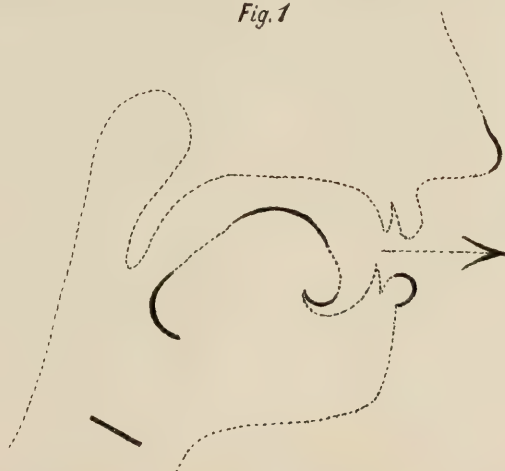


Fig. 2.

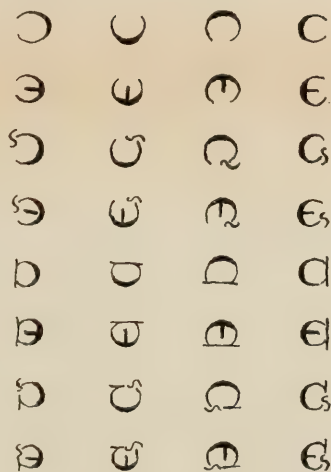


Fig. 3.

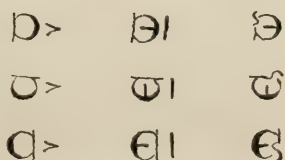
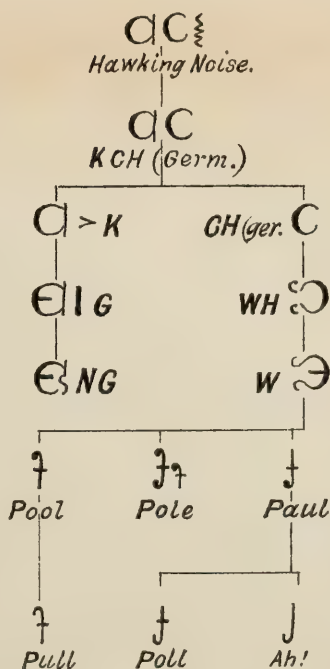
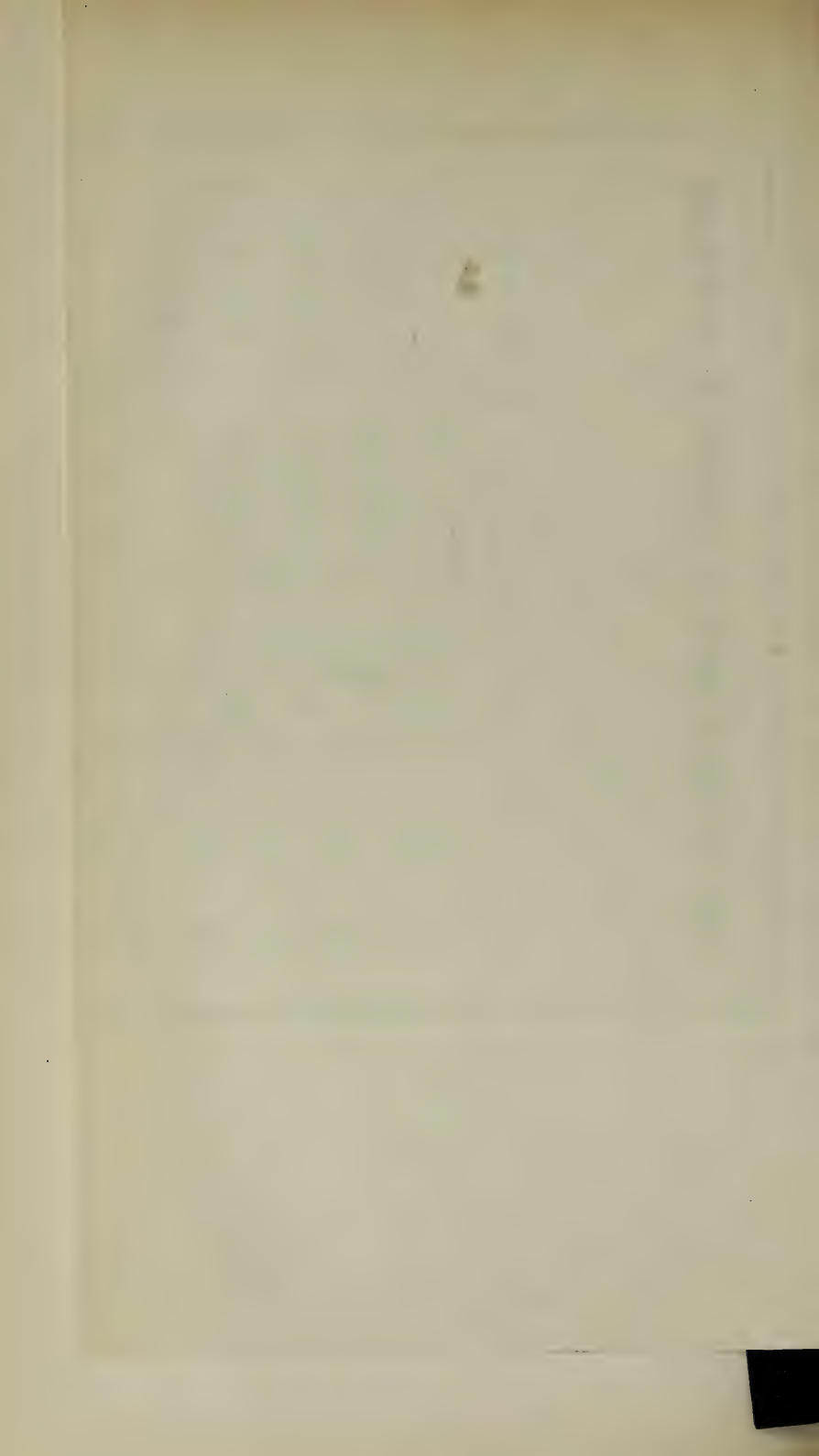


Fig. 4.





of a lip; that for the point of the tongue its picture, and so with other parts.

The sign for the lip is used for every sound formed by the lips; so with the point of the tongue, the top or "front" of the tongue, and the back of the tongue.

The sign for the throat represents a mere chink or slit in the throat, and is pictorial of the vocalizing condition of the glottis. It therefore means "voice."

The sign for the nose is, in reality, pictorial of the uvula, the pendulous extremity of the soft palate. When the soft palate is depressed, the breath passes up behind it and escapes through the nostrils. When it is raised, the communication between nose and mouth is cut off. Hence the application of a symbol originally pictorial of the soft palate to the nose. It means "air passing through the nostrils."

But to return to our pupil. He knows nothing of the deep meaning underlying these symbols. To him the strange lines upon the board are only the remains of a picture. Filling up the gaps, in imagination he recognizes the crooked line as a portion of the nose, the curves as so many parts of the mouth, and the straight line as the throat.

The next step is to isolate the symbols, so that our deaf-mute shall recognize them independently of their position in the diagram. They are accordingly written in one line below the fragmentary picture.

The crooked character is shown, by reference to the face above, to be the same as the nose; the straight line, the throat; and the curves, the various parts of the mouth.

The elementary forms are then built up into more complex shapes.

The second line illustrates the junction of the curves with the straight line.

In the first symbol the curve is seen to be the under lip, and the straight line the throat. The name of the

symbol is "lip-voice." The child describes it by pointing to his lip and then to his throat.

The third line shows the union of the nose sign with the various curves; and the fourth exhibits a triple combination, viz: a part of the mouth, with nose and voice signs added.

A character indicating a peculiar position of the vocal organs is next introduced. Observe the first symbol in the fifth line. The space enclosed by the curve is symbolically *shut in* by a line drawn across the ends.

Thus a straight line (made thin to distinguish it from "voice") is called "shut." The idea is conveyed by forcibly closing a book before the eyes of the pupil. Whenever he names the sign he imitates this motion.

The fifth line exhibits the union of this symbol with the various curves. The first character in the line, named "lip-shut," is described by touching the under lip, and then imitating with the hands the closing of a book. Here, for the first time, the idea of the directive nature of the symbols begins to dawn upon the deaf-mute. In conducting classes I have invariably found that when this point has been reached, at least one of the pupils would illustrate the symbol by *shutting his lips*.

The characters in the sixth line are composed of a curve and the signs "shut, voice."

Those in the seventh contain a curve and "shut, nose;" and the symbols in the eighth line are analyzed into a curve and "shut, voice, nose."

The broken outline of the face, which has been retained as an assistance to the memory, is now dispensed with, and the pupil is required to describe all the symbols again.

For the convenience of the reader, I give below the names of the symbols, in a tabular form, using the initial letters of the words Shut, Voice, Nose, Lip, Point, Front, Back:

(Key to Fig. 2.)

N	V	L	P	F	B
		LV	PV	FV	BV
		LN	PN	FN	BN
		LVN	PVN	FVN	BVN
		LS	PS	FS	BS
		LSV	PSV	FSV	BSV
		LSN	PSN	FSN	BSN
		LSVN	PSVN	FSVN	BSVN.

It will be observed that, though at the first lesson thirty-four characters have been introduced, the memory is burdened with only four forms, viz: a curve, (turned in different directions,) a crooked line, a thick, straight line, and a thin one.

Though the sounds of speech may be *infinite* in variety, they are all formed by a limited number of organs; and they can all be represented by the combinations of ten elementary symbols.

The name of a sound-symbol is in reality a command *to do something with the mouth*.

Take, for example, the first character in the eighth line, (see illustration,) "lip, shut, voice, nose." This is, in effect, a direction to shut the lips and pass the voice through the nose. In explaining this symbol to a deaf-mute, one of his hands is placed upon the teacher's throat, and the other against the nose. If, then, the teacher makes the sound of the letter M, the pupil *sees* that the lips are shut, and *feels* a vibration in the throat and nose.

The symbols in fig. 3 represent the sounds of the following letters as taught to the children in the Boston school:

P	B	M
T	D	N
K	G	NG.

All one can say concerning the Roman letters is, that P is P, B B; etc. But the symbols tell us that P is formed by shutting the lips, and then making a puff of air, while for B, the lips are to be shut while the voice is sounded, and then a puff of voice is to be given, etc.

The characters exhibit to the eye all the relations that

the sounds themselves do to the ear; and the organic relations are just as clearly shown:

As P is to B, so is T to D, and K to G.
 As B is to M, so is D to N, and G to NG.
 As P is to T, so is B to D, and M to N.
 As P is to K, so is B to G, and M to NG,
 etc., etc.

P, B, and M have the "lip" and "shut" signs in common; and in sounding all, the lips are shut.

T, D, N, agree in shutting off the breath by means of the point of the tongue, and K, G, NG, in the closing action being performed by the back of the tongue.

Furthermore, the sounds P, T, K, (represented by the same symbol turned in different directions,) are made by the same organic action performed at different parts of the mouth; so with B, D, G, and M, N, NG.

When a deaf-mute has thoroughly mastered the meaning of the symbols, he is required to sound one of the characters; that is, the attempt is to be made to do with the mouth what the symbol directs.

The pupil, having little or no control over the movements of the vocal organs, will probably make a very different sound from that intended; but the first point gained is, that he makes a noise of some kind. Whatever it happens to be—whether a cough, or a growl, or a sneeze(!)—it can be written symbolically. From this sound as a starting-point, others can be developed in every direction, until all the English elements have been obtained.

I shall illustrate by a case that has actually occurred.

A middle-aged deaf-mute, a resident of Boston, was studying the symbols with me.

I directed his attention to the vibration of my throat in sounding voice. He attempted to imitate this by a peculiar hawking noise—somewhat as if he were coughing up phlegm.

After repeating the sound several times, he analyzed my representation of it, (see fig. 4,) and thus became con-

scious of what his mouth was doing. In forming this sound the tongue is first put back so as to shut off the air from the mouth. The breath is then forced out between the tongue and soft palate in such a way as to set the uvula vibrating.

Upon presenting the symbols to him, minus the "trill" or shake, he made the sound gently, and without vibrating the uvula. What he gave was in reality an English element, (K,) followed by the German sound of *ch*.

The next point to be attained was to separate these elements, so as to have the English sound on one side, and the foreign one on the other. The first element of his sound was accordingly written with the sign for a puff of breath after it. He gave at once the letter K. The German *ch* was also obtained at sight of its symbol.

The attempt to pronounce K with voice produced G; and NG resulted from passing the voice through the nose.

By sounding the German *ch* with the lips nearly closed the English WH was obtained. W was given by adding voice. This sound may be considered, for all practical purposes, identical with the vowel *oo* in "pool." From this vowel five others were obtained by merely opening the mouth very gradually.

Thus from the original hawking noise eleven English sounds were developed by the directive power of the symbols.

This method of leading from one sound to another renders the acquisition of the English elements a matter of absolute certainty; but it is inapplicable to very young children. In all cases, however, mechanical assistance will accomplish what the intellect of the child is unable to do. The symbols inform the teacher of the correct position of the organs in producing any sound. By the exercise of a little ingenuity the child's tongue can be pushed into the required position by means of a pencil or pen-holder.

Mechanical assistance has been found to be so absolutely

necessary that a manipulator of a convenient shape has been constructed of ivory.

Suppose we fail to obtain K from a child ; a sound of *similar formation, but further forward in the mouth*, may be experimented upon. We shall presume our pupil can pronounce T. In T, the shutting action is performed by the point of the tongue ; in K, by the back. (See fig. 3.)

If the teacher holds the manipulator so as to prevent any portion of the tongue from rising *except the back*, the attempt on the part of the pupil to say T will produce K. The manipulator is at once placed in the hands of the pupil himself, and the experiment is repeated. A mirror held before his face shows him the position of his tongue. It invariably follows that after a few attempts the child is enabled to pronounce the sound without any assistance whatever.

A plan for the development of sounds by means of the manipulator has been devised. It may be interesting to know that twenty-six English elements can be *forced* from the one sound TH.

PLAN OF INSTRUCTION.

In teaching articulation a radical difference must be made at the outset between the semi-mute and the deaf-mute proper. The former has already *learned to talk*—the latter has everything to learn.

Our object should be to *keep up the knowledge* of spoken language possessed by the semi-mute, and to teach him the pronunciation of new words. This can be accomplished by the symbols of Visible Speech ; and his voice may be prevented from becoming monotonous by the use of the allied elocutionary notation.

But the congenital deaf-mute (who may be taken as the type of the other class) has had no practice in the use of his vocal organs ; and his mouth is at first incapable of using the language of hearing persons. The instrument of speech must be mastered like any other instrument—*by slow degrees*.

Hearing children (being guided only by imitation) require five or six years' practice in order to talk correctly, and even then it is astonishing how many grow up with defective articulation.

To expect the congenital deaf-mute to talk the moment he has mastered the elements of speech would be as unreasonable as to expect a child to play one of Beethoven's sonatas when he only knew the notes of his piano. He must have long and patient practice of scales and exercises, in order to obtain command over his instrument; he must have oral gymnastics, as a preparation for speech.

Should any one try the experiment of teaching a novice in music to play a sonata correctly, we may predict the result. Rapid passages would be slurred over, and many false notes be given.

The difficulties of execution would cause the performance to appear, at best, labored and mechanical, and the pupil would probably be disheartened. Should there be any approach toward correct playing, it could only be made through indomitable perseverance on the part of both teacher and pupil.

Analogy reveals the cause of the only partial success that has hitherto attended the efforts to teach articulation to the congenital deaf-mute. The attempt to make him utter words and sentences *from the very outset of his education* can only be productive of imperfect articulation. It will be difficult, and in many cases impossible, to correct afterwards the defects engendered by too great anxiety for progress on the part of his teacher.

The mouth must be educated to produce sounds before the difficulties of spoken language can be successfully grappled with. By means of the symbols the elementary sounds may be combined in all sorts of ways to form *senseless* compounds analogous to syllables, words, and sentences. These should be uttered at first very slowly; then, by degrees, faster and faster, until the power of correct and rapid utterance has been attained. Then, and

not till then, will it be safe to introduce articulation with sense attached.

I have suggested the following plan of instruction, which is suited to the capability of the very youngest beginner.

The imitative faculty of the child should be educated to the utmost, by causing him to copy the motions of the teacher's mouth. Direct him to make his tongue hard or soft, round or spread out flat; let him move it backward and forward, up and down, or in any way the fancy of the teacher may dictate.

English sounds may be obtained by imitation, and associated arbitrarily with their symbols.

The teacher should be careful not to spend too much time in laborious and disheartening efforts to obtain by imitation what will be more easily and certainly acquired afterwards. What is wanted is a mere foundation to work upon in the future. A skilful teacher will not confine himself to English elements, but will take whatever sound the child happens to make, and associate *that* with its correct symbol.

The sounds obtained are to be practised in easy monosyllabic combinations, until they can be certainly discriminated.

When the child's attention is capable of being fixed, the meaning of the Visible Speech symbols may be explained to him. After this, he must *describe* as well as *sound* the elements mastered. No difficulty will be found with children of six or seven years of age.

New sounds should next be developed by appealing to the mind through the analogies of the symbols, and by forcing the tongue into new positions by means of the manipulator. Thus the mind, the eye, and the sense of touch in the pupil co-operate with the mechanical skill of the teacher to produce sure and certain results.

No articulation, however perfect, will be *agreeable* unless strict attention is paid to the accent and quantity of syllables, and to the modulation of the voice. I have there-

fore recommended that the study of rhythm, and the cultivation of the voice, should be added as *separate branches of education*, as soon as possible.

It is apart from my present subject to enter into a description of the notation for rhythm and modulation. Suffice it to say that a rhythmical exercise may be written upon the board. The children are required, at first, to clap their hands, or tap their slates, or make some other visible motion, *in concert*, while marching round the room. The rhythmical repetition of a syllable can then be substituted for the clapping of the hands, the pupils marching as before. Finally, the marching is relinquished, and the teacher beats time with his hand instead. In this way an appreciation of rhythm is developed before applying it to words. Classes can be exercised with regular rhythm, as it occurs in poetry; and individuals, with the irregular rhythm of prose.

In regard to the modulations of the voice, all deaf-mutes can be trained to recognize at least five indefinite pitches. These may be called, "very high, high, medium, low, very low." By gliding from one to another, inflections can be produced. When these have once been obtained, we may seek to associate them with *feelings*.

Suppose the word "farm" to be uttered with a rising inflection suggestive of interrogation. Let the teacher *look* interrogatively. The pupil will unconsciously imbibe the idea that the word "farm," with such a rise of the voice, is equivalent to the sentence, "Is it a farm?" So with other inflections. Modulations of the voice, expressive of surprise, sorrow, anger, etc., should have their meanings visibly apparent in the face of the teacher.

I look forward with confidence to the time when deaf articulators will be taught the principles of elocution, so as to be enabled to read and speak with expression.

The following is a brief recapitulation of the plan of instruction:

- I. 1. Educate the imitative faculty.
2. Obtain sounds by imitation, and associate them arbitrarily with their symbols.

- II. 1. Understand the symbols of Visible Speech, and describe the sounds obtained by imitation.
- 2. Utter easy monosyllables, formed from the sounds obtained by imitation.
- 3. Commence the study of rhythmical motions.
- 4. Obtain differences of pitch.
- III. 1. Develop the remainder of the English alphabet from the sounds obtained by imitation.
- 2. Give oral gymnastics, with monosyllabic combinations of all the sounds perfectly uttered.
- 3. Repeat a syllable rhythmically.
- 4. Glide from pitch to pitch, so as to obtain as great a variety of inflections as possible.
- IV. 1. Practice oral gymnastics with polysyllabic combinations, giving differences of accent and quantity.
- 2. Repeat a monosyllable, with differences of accent and quantity, and with inflections of the voice.
- V. 1. Utter polysyllables containing difficult combinations of consonants.
- 2. Give polysyllabic combinations analogous to sentences, attending to accent, quantity, and to the movements of the voice.
- 3. Teach the spoken names of familiar objects. Seek merely to form a vocabulary.
- 4. Repeat words with different inflections, so as to convey an idea of the expressiveness of the various tones.
- VI. Articulate sentences with fluency and distinctness, attending to accent, quantity, and to the inflections of the voice.

Space has not permitted me to give more than a mere idea of the nature of the symbols of Visible Speech. For further particulars the reader is referred to the Inaugural Edition of the system.*

* This may be obtained from Messrs. Lee & Shepard, publishers, Boston.

In conclusion, I should like to draw attention to the fact that Visible Speech can be explained by means of diagrams, so that foreign teachers of the deaf and dumb can reap the advantages of the system without the necessity of studying our language.

THE INSTRUCTION OF THE DEAF AND DUMB.

BY B. D. PETTENGILL, PHILADELPHIA.

THE chief calamity and only very serious evil resulting from congenital deafness and dumbness is the state of intellectual and moral darkness to which the person so affected is, in consequence of his affliction, consigned. Being without a language, he has but few ideas, can reason only to a very limited extent, and is profoundly ignorant even of the most common matters which form ordinary topics of conversation among persons who hear and speak. In fine, his intellectual condition is little above that of the more intelligent brutes, and lower than the most unenlightened savage's. All philologists and mental philosophers agree that it is the gift of language that chiefly distinguishes man from the brutes, and that, without it, he would have little claim to the title of a rational being.

Evidently, that system of education which most speedily and effectually brings the deaf-mute from darkness to light, most extensively cultivates and improves his intellectual and moral faculties, and the soonest renders him an intelligent, reasonable, and civilized being, is the one most productive to him of beneficial results, and the one most worthy of general adoption. The readiest, and almost the only means of securing these results, is the introduction of this benighted being to an intelligent community where the pantomimic language, called the language of signs, is the ordinary means of communication. The deaf-mute child soon learns the language, and in a very brief period becomes informed of, and able to converse on, all subjects which ordinarily engage the attention of chil-

dren of his age. By means of signs alone, without the use of language, written or spoken, deaf-mutes may be instructed in every species of knowledge. But without any special instruction, the mere residence of a deaf-mute for a few months in an intelligent community, where signs are employed, by the knowledge which he is sure to gain through that medium, relieves him of the only serious evil of his affliction, and elevates him from the rank of a savage to that of a civilized being. Attempts made, in any quarter, to decry the language of signs, to restrict its use in the instruction of deaf-mutes, or to discard it altogether, are, in my view, mistaken and unreasonable. Deaf-mutes owe an immense debt of gratitude to this beautiful and expressive language, and there is no other medium of instruction which can adequately supply its place. All schemes of educating deaf-mutes which contemplate leaving them for years to grope in the darkness of ignorance, when they might immediately be brought to the light of knowledge, through the medium of signs, I regard as radically defective and erroneous. The grand aim of all schools for the deaf and dumb should be to enlighten the minds of their pupils and to cultivate in them correct moral and religious principles and habits; this can best be done through the medium of signs.

The other evils than that to which I have referred, resulting from congenital deafness, are simply inconveniences such as persons who hear and speak are often called upon to experience. The most important of these is, that, on leaving the community where he has learned the language of signs, the deaf-mute, if he has acquired that language only, is placed in the position of a person in a foreign land who is unacquainted with the language of the people among whom his lot is cast. A deaf and dumb person, whose mind had previously been cultivated by signs, and who had thus become possessed of ideas to communicate, would undoubtedly, on coming to reside permanently amongst persons unacquainted with his peculiar language, like foreigners who hear and speak,

establish some medium of communication with those around him, probably by teaching his own language of signs to some of his more intimate friends, who would act as interpreters to others, and by learning, at his own instance, so much of written language as would enable him to communicate on ordinary topics with strangers ; but, as a matter of fact, he usually acquires a sufficient knowledge of written language, for this purpose, in the institution where his knowledge of signs is obtained.

The only remaining evil of the condition of the congenital deaf-mute to be considered is, that the means which he and his friends employ in communicating with each other are slow, indirect, and unusual, and sometimes inconvenient in use ; and that, in consequence, much that is said in the social circles in which he moves does not come to his knowledge, and much that he would say, had he the faculty of speech, remains unsaid. This is no great calamity. He does not lose much by not being apprized of all that is spoken in his presence, nor would his associates gain much could he communicate his ideas to them more rapidly, frequently, and directly. But, notwithstanding the slight importance of this small inconvenience, many philanthropists have set themselves to remedy it, as though it were the chief evil of his condition. Incredible pains have been taken in many cases, and in various institutions for the deaf and dumb, to teach deaf persons to utter sounds which they can never hear or have any conception of, and to understand or rather guess at the words uttered by others by watching the motions of their lips.

The success of these efforts in most cases has been far from satisfactory. A few instances, however, can be named where even congenital deaf-mutes have learned to articulate and read from the lips so well as hardly to be distinguished by their conversation from persons in possession of all their faculties. Where a deaf-mute exhibits a capacity for the attainment of this difficult art, and the time which is necessary for its acquisition can be spared

from more important occupations, and the expense which it involves can readily be borne, all agree that the art of conversing by articulation is for him a desirable accomplishment, and more completely restores him to society than can be done simply by writing ; but, in most cases, where deaf-mutes have been subjected to the unnatural and irksome processes required in attempting to teach them to speak, one is led, from the inconsiderable benefits obtained by these attempts, to wonder how their parents could have been induced to allow them “to go through so much to learn so little !”

Having considered the case of deaf-mutes as regards the peculiar evils of their condition and the means of the removal of these, I come now to speak of the school education which they require in common with persons who hear and speak. In all the American institutions for the deaf and dumb, the pupils in attendance are instructed in the ordinary branches of learning which are taught in our public schools ; but are chiefly occupied in the endeavor to attain to a complete knowledge and use of *written language*, that by this means they may be introduced to the world of literature and books, and be able to communicate, by writing, with persons present or absent. Children who hear and speak learn to read written language by being taught the sounds which the written characters represent, which is sufficient to give them an understanding of the meaning of the words ; but as deaf-mutes have no knowledge of sounds, they can only learn to read intelligently by translating the written words into their own language of signs, or into the natural language of action through which all speaking children originally learn spoken language.

The sign-language lacks the inflections of artificial languages, and is presented in a different order from that which is maintained in the use of the English language. The two languages are so diverse in their construction that the attainment of a complete mastery of the latter, through the medium of the former, is a task of very great

difficulty to the deaf and dumb, and is seldom perfectly accomplished. Most of our pupils acquire a knowledge of written language, while under a regular course of instruction, sufficient to enable them to express their ideas in an intelligible manner by writing, and to read understandingly books written in a very simple style. But it is rare that a congenital deaf-mute, on leaving one of our institutions, can read books of an elevated character with an entire comprehension of their contents, or express himself by writing, for a length of time, with entire correctness in point of grammar, phraseology, and style; and the written language of a considerable portion of our pupils is but a confused medley of words, put together with very little regard to the proper order of their arrangement or of the rules of syntax.

As seminaries for relieving deaf-mutes of the evils incident to their condition, and cultivating their minds and hearts, the American institutions for the deaf and dumb, conducted on the French system, are (principally on account of their superiority in the use of the sign-language) surpassed by none in the world; but as schools for teaching written language, which is the main business in which they are engaged, their success has not been all that could be desired.

All instructors connected with our institutions are very properly and anxiously inquiring, How can our pupils be brought to a better knowledge and use of the English language? An attempt to answer this inquiry, and to present my own theory on this point, will be the subject of the remainder of this paper.

The best way to learn a language seems to be one of those secrets hidden, for the most part, from the wise and prudent, but revealed unto babes. Children learn language without studying it, but persons of a maturer age study a language for years without learning it.

A gentleman who had been travelling in France, on his return home, being asked what of all that he had seen in that country surprised him the most, replied: "The most

wonderful thing to my mind was, that all the little children spoke French so well." Children unconsciously and insensibly, without any special effort of their own, learn the language of those persons with whom they associate, and, what is most surprising, if the persons with whom they associate use the language correctly, the child, in due time, employs all the inflections of the language, makes all the proper variations in moods, tenses, cases and persons without any special instruction on these points, and becomes, in fact, a little philosopher, grammarian, and philologist without aiming at or knowing it! The child learns the meaning of the words he hears spoken by the signs, gestures, expressions of the countenance, varied intonations of the voice, and particularly by the actions which precede, follow, or accompany the words. No artificial language can possibly be acquired without the use of a natural language with which to interpret it. The mother says to her child, "I love you," and smiles, hugs, and kisses him, which makes the words expressive to his mind. His little brother in anger scowls, pushes him, and says, "I hate you," and ever after the child knows the meaning of these words. His father says to the servant, "Shut the door," and the child observes the action that follows and takes cognizance of the meaning of the phrase. In regard to the learning of abstract words, we may say that when a child has heard a word of that character used for a number of times he begins to have a fixed idea of its meaning and ventures himself to use the word in a similar connection, but never employs a word simply from having had it defined or explained to him.

In a manner similar to that shown in the examples given, he acquires all the language used in ordinary conversation, and whether he is of quick or of slow apprehension, in a short period learns to use the language with the same correctness as his associates use it. It is to be observed from the examples given above that children are not taught words singly and unconnectedly, but in com-

plete propositions ; they do not learn the meaning of the phrases from a knowledge of the words that compose them, but gather the meaning of the words from understanding the phrases of which they form a part.

In regard to the rules of grammar and the principles on which the language is founded, nobody ever tells the child, for instance, that he must use the article *an* before a vowel except in certain cases, or the article *a* before a consonant, or that plural nouns generally terminate with the letter *s*, but he makes these discoveries himself, lays down his own rules, and makes his own grammar.

There are only two distinct methods of teaching and learning a language : first, this natural method by which children acquire it by practice and usage ; and, second, the artificial method employed in schools, by which the teacher attempts to analyze the language and bring the pupil to the knowledge of it by laying down certain rules and principles by which he is to be guided in using it, called teaching him the grammar of the language. This is the method employed in our higher schools and colleges in the study of the dead languages, and certainly is not the way to master those languages, as the results attained by this process abundantly prove. Luther says that probably no person ever arrived at the practical knowledge of a language by the study of the grammar of it alone.

Our system of teaching language is substantially the artificial method employed in schools, slightly modified and improved. We teach from the stand-point of a mature mind, giving to our pupils long lists of unconnected words and parts of sentences having no meaning by themselves ; we philosophize, attempt to analyze the language, and to point out the principles on which it is founded, before the uncultivated minds we are attempting to instruct have any very clear idea that there is such a thing as language. With educational views similar to these, that erudite pedagogue, Mr. Solomon Lolly-

pop, commenced teaching Johnny and Tommy to say their A, B, C's. "These alphabetical symbols, young gentlemen," said he, "are the elements of all literary knowledge, and in their various combinations possess functions capable of transmitting from one mind to another every species of intellectual intelligence." Johnny and Tommy scratched their unkempt heads and said "Yes, sir."

The measure of success obtained from the system we employ is that which might be expected, and which others attain from using similar processes. A teacher in one of our institutions has placed under his charge, I will say, a class of twenty pupils, of different ages, capacities, dispositions, and cultivation. The task before him is, I will presume, in a course of six years to render these pupils proficient in the use of the English language. He labors zealously, faithfully, and with ability, according to the light given him, proceeding in the steps of his predecessors and according to the practice of his associates. The result in all cases and under all teachers is similar.

About one-fourth of the pupils of his class, on the completion of the course of instruction, being of superior abilities, having had some previous training and culture, and a good deal of practice in conversing with their hearing friends, are enabled to write on ordinary topics with facility and a good degree of correctness, rarely making any gross blunders of expression, and are able to read books written in a style of simplicity and clearness understandingly and with interest.

About one half of the class make occasional blunders whenever they write, and have less taste than the others for reading and less ability to read.

The remaining five pupils, possessing fair mental capacities, but having, it may be, peculiar, irregular, or ill-disciplined minds, fail almost entirely to comprehend the principles of the language they are endeavoring to

learn, make the grossest errors in expressing themselves by writing, and are able to gain very little information from newspapers or books.

I may add that where the class is composed partly of semi-mutes, or the pupils have been selected and placed together on account of their uncommon capacities for improvement, a somewhat better result than that stated above may be expected.

In some institutions these five unimproved pupils would be removed from the class in which they were originally placed and put into a class of a lower grade, or into what the pupils call "the dunce class;" but dull pupils differ from each other in the kind of instruction which they require as much as they do from those who make more rapid progress, and I submit to any teacher, whether, in case of their transfer to another class, the last state of these dull pupils is not usually worse than the first. There is nothing less commendable in the management of our institutions, in general, than the manner in which dull pupils in respect to their instruction are treated. Speaking children of the same grade of intellect completely master their vernacular language, and so could dull deaf-mutes master written language, if sufficient attention were paid to them, and they were taught in the right way. They ought to have the best teachers assigned them, be taught language by the practical method, by usage, and be instructed individually, and not in large classes.

All philosophical writers on the subject of the instruction of deaf-mutes agree in expressing the opinion that the nearer we conform our methods of teaching written language to those which nature employs in teaching spoken language to children who hear and speak, the greater will be our success. That we do not at present pursue this natural method to any great extent, may be inferred in advance from the fact that, at the very age when children best learn language by the natural method, they are not admitted to our institutions. The processes by which written language must be taught must of

course differ in some respects from those employed in teaching spoken language, but the general method may be the same.

I venture to lay down this general principle in regard to teaching language, either to deaf-mutes or to persons who hear and speak, that the very best way to teach a language to any person is for the teacher *to keep up a perpetual discourse* with his pupil in the language he wishes him to learn, and in no other, until the pupil masters the language. The teacher of deaf-mutes should continually spell with his pupils by the manual alphabet, and continually write with them on black-boards, slates, or paper, in regard to events which may occur naturally, or which he may cause to appear to occur, or of which they may have been informed through the medium of signs, keeping ever in mind that constant repetition of the same phrases and a thorough retention of them by his pupils are the keys to success. All formal definitions or direct inculcation of rules and principles should be entirely avoided, at least in the first stages of instruction. Where the employment of signs in the school-room seems necessary for the imparting of new ideas or to make the meaning of the written language presented to the pupil more clear, he should not hesitate to employ them; but he should continually bear in mind that it is verbal language and not the sign-language which he is endeavoring to teach.

That teaching language directly by usage is practicable is proved by the case of Laura Bridgman and others. And that practice in conversing by writing is what our pupils chiefly need to promote their improvement, is indicated by the fact that many of them make more rapid advancement in the attainment of a correct use of language in vacation than in term-time, and that some who are quite indifferent writers on leaving the institution, subsequently, by constant conversation with their friends by writing, attain at length to quite a correct, and even an elegant use of language.

But to teach by the natural method it is absolutely essential that much of the instruction given should be addressed to the individual. Teaching language by usage is not practicable to any great extent in large classes. All pupils will not pay the same attention, and some require more constant repetition than is required by others, and a different kind and amount of instruction. No class of pupils where a good deal of special training is required, as is the case with the deaf and dumb, should be larger than an ordinary family. The family is the type and the true model of the school. Who first originated the idea and established the custom that a class of deaf and dumb pupils should number about twenty? I think that this practice of having large classes has done more to retard the progress of our pupils than almost any other.

It is a striking fact in the history of the education of deaf-mutes that some of the greatest recorded successes in their instruction are among the earliest. The pioneers in the cause, Ponce, Carrion, Amman, Pereira, and others, certainly brought their pupils to a higher point of attainment than is usually reached in our institutions for the deaf and dumb; not that they employed any peculiar and wonder-working processes in teaching their pupils, but because they had but few pupils to teach, a long time in which to teach them, and taught them language, as I suppose, mainly by practice and usage. And at the present day, whenever we hear of a deaf-mute who has made surprising attainments, it is almost invariably some one who has received a great deal of special individual instruction from his parents, a private teacher, or some other source. Clerc and Massieu, although they received their education in an institution for the deaf and dumb, never would have attained to the rank they held as scholars, had they not been special favorites of their gifted master, and received a great deal of special instruction and training. In the Northampton Institution for the Deaf and Dumb, where the teachers have attained to such

a degree of success (under what I consider an erroneous system) as to surprise some instructors of other institutions, it is to be observed that all the classes are small, and much of the instruction personal and individual.

Small classes would of course involve a greater expense and require a greater number of teachers to each institution than are now employed ; but it is a favorite maxim with us, and I believe a just one, that whatever is necessary for the promotion of the best interests of deaf-mutes the public are willing and ready to grant ; that whatever ought to be done for them can be done. The expense, however, under the natural method of teaching language, need not be so great for the individual teacher as is required under our present system. To teach language scientifically and philosophically with marked success, through the medium of signs, requires in the teacher histrionic abilities sufficient to give distinction on the stage as an actor, a thorough knowledge of the philosophy of language and of the mind, a general knowledge of all the terms used in all the arts and sciences, and in all the various operations of life ; in fine, an education and culture liberal, exact, and extensive ; and, of course, such a teacher must be paid according to his acquirements. But to teach language by the natural method, a nurse, provided she uses the language correctly, is as good an instructor as a philosopher ; for all that is required of her is to keep talking, and to keep her pupils talking, and in time the end aimed at is reached.

My ideal of a model institution for the deaf and dumb would be one that should have within its walls not more than fifty pupils, divided into classes of about half-a-dozen members each, remaining under instruction ten years. Each class should be under the charge of a zealous and faithful female instructor, who should teach her pupils written language directly by usage, and spoken language to those pupils who are capable of acquiring it. The institution should have a male principal and vice-principal, men of liberal education and accomplished

sign-makers, who should lecture daily to the pupils in the language of signs on all the various subjects calculated to enlighten or interest them. The pupils should be allowed to talk by signs at pleasure, except in the school-room, where verbal language should be considered the proper mode of communication to be employed.

In such an institution, from the fewness of its numbers, the wants and requirements of each individual pupil would be likely to receive more special attention than is now generally given, and the physical, moral, and intellectual improvement of the pupil would be likely to be much greater than in larger institutions.

I have now stated my views as to the best methods of instructing deaf-mutes, especially as regards the acquisition of written language. For obvious reasons, I have not had opportunity fully to test these theories by actual practice; but I am confident, from my own experience in the employment of the methods proposed, as far as it has extended, that if ever our pupils as a class leave our institutions accomplished proficient in the knowledge and use of written language, it will be through a reform in the direction here indicated—that of smaller institutions, smaller classes, and the teaching of written language directly by usage.

SHALL WE ABANDON THE ENGLISH ORDER?

BY E. G. VALENTINE, B. A., DELAVAN, WISCONSIN.

THE assumption that signs should be rendered in the order of the English language has elicited an animated discussion during the past year. In this article, it is my purpose to review the various arguments, *pro* and *con*, touching this subject. I shall take the liberty to quote and comment upon remarks made at the Indianapolis convention, and, in like manner, I shall notice certain articles on the subject written since that time.

In speaking of the sign-language, President Gallaudet said: "I do not defer to any one in my admiration of the

sign-language. It is a beautiful language ; I admire it. I admire the grace of it, the force of it, the rhetoric of it. I admire many things about it." So far as I am concerned, I gladly assent to all that has been said favoring signs as a means for deaf-mute instruction. Without this instrument, the teacher of the deaf-mute would find the work of instruction to be most weary, indeed ; and I would not deny the assertion that the deaf and dumb cannot be successfully instructed without the aid of signs. And yet our opponents will tell you that we wish to "obliterate" the sign-language, and that, if signs are rendered in the English order, "we shall lose, at length, our language of signs altogether." We might as well affirm that a man will eventually lose the use of his voice by speaking in the language with which he is most familiar. So long as there are deaf-mutes, just so long signs will be used as a means of communication. I do not now refer to the sign-language with reference to any particular order of expression, for it has been hitherto, and will be hereafter, shown that signs have no natural order of expression, but, bearing the same relation to written language as the human voice, they can, like it, be adapted to any language, or else they are a failure.

Obliterate the sign-language ? We might as well attempt to destroy the discoveries of Newton or Franklin, of Fulton or Morse, as those of De l'Epée and his coadjutors. Our opponents say that we desire to annihilate the whole structure of the sign-language. Not so by any means. We only seek to eradicate the present defects in the structure, and make the sign-language what it should be, a *sure* and *safe* means of right instruction.

What is the object of deaf-mute instruction ? Says Dr. Gallaudet : "The object of the instruction of the deaf-mute is to prepare the deaf-mute to live in a world of hearing and speaking people, and sustain himself." That implies a good understanding of our language. Whatever, then, tends to retard the deaf-mute's progress in gaining a fair knowledge of the English lan-

guage should be rejected, and whatever tends to accelerate his acquirements in this direction should be adopted; and, of two systems, the one which best enables him to acquire the language of words should certainly be followed. It would seem that our friends, in their zeal to uphold a certain system, forget this great object, which we should all have in view.

They talk of our destroying the beauty and grace of the sign-language. This we do not admit; and yet suppose we grant it. Of what use is a pretty, graceful little machine, if it have not the power to do the work designed for it? Is it our object to cultivate the sign-language as a fine art? If it is, our institutions had better be turned into schools for sign-making, and our pupils be graduated accomplished sign-makers, to the sacrifice of all other necessary acquirements.

There seems to be a misunderstanding in regard to the terms "natural order" and "natural signs." What is the meaning of these terms? In a previous essay, (see the proceedings of the Indianapolis convention,) I endeavored to prove, and my arguments have not been controverted, that the sign-language has no natural order. What do the inversionists have to say on this point? Says one: "Now, as to whether the present order is the natural order or not is of no consequence; it is an existing fact there is a sign-language, and it is in the inverted order; it is no matter whether it is in the order of nature or not." We claim, then, both by force of argument and by permission, the right to assume that there is no such thing as a "natural order" of the sign-language. Our opponents have no right to use the term unless they can conclusively prove its reality. But my friend says: "It is an existing fact there is a sign-language, and it is in the inverted order." Again, he says: "If you would avail yourself of the English language, or any other idiom of speech, you must avail yourself of what exists, and not of what does not exist." Many "existing facts" there are that cannot stand the test of a fair examination. We believe there are certain

defects in the manner in which the sign-language is used in several of our institutions, and we claim the privilege of inquiring into this matter, and are not willing to be governed simply by "existing facts." They tell us that this theory of inversions came into use only about thirty-six years ago. It would seem that they draw conclusions from "facts" which they themselves have invented. A word in regard to the term "natural signs." In speaking of certain essential qualifications of the teacher of the deaf and dumb," Rev. T. H. Gallaudet once said: "A teacher of deaf-mutes cannot be thoroughly qualified for his profession without being master of the language of signs—*natural*, as expressed by the countenance, gestures and attitudes of the body; and *artificial*, as far as art has enlarged and perfected this natural language." The above defines the term "natural signs" better than I can. The term is often used in the sense of signs in the inverted order. Natural signs have nothing to do with the theory of inversions. I have noticed these matters that we may not be deceived by the unfair use of terms.

It has been strongly urged that the inverted order of signs is the natural order of thought. It is said that the deaf and dumb think in this inverted order, and that, in this respect, the sign-language "follows the methods in which all minds conceive of objects and actions." This "*ignis fatuus* of deaf-mute instruction" has been ably commented upon by President Gallaudet, (proceedings of the Indianapolis convention, pages 62 and 63; also the *Annals*, vol. xvi, pages 31 and 32,) and it is with no little diffidence that I attempt to add anything to his remarks on this point. It is also claimed that signs rendered in the inverted order "are pictorial," and are subject to all the conditions of a picture; and, *vice versa*, that signs rendered in the order of the English language "are not, and do not pretend to be, a reproduction of events as they occur in nature;" and further, that, "in their use, the idea of a picture is impossible." Our

opponents seem to have risked their cause almost, if not altogether, on the above assertions ; hence I trust I may be pardoned for considering these statements somewhat at length. These statements, and the arguments supporting them, are so similar in many respects, that I shall comment upon them connectedly.

It is well, in the first place, to understand what we mean by *thought*—one of the most indefinite terms in any language. I apprehend it, as here used, to mean what is defined by the logicians as the *connection of ideas*. But in what manner are ideas combined? Is it mere succession, one idea succeeding another in rapid sequence, or do they co-exist in the mind? In other words, is thought the concatenation or the unification of ideas? I think the latter. No succession, however close, is sufficient. If one idea passes from the mind before another enters, it does not matter whether it be at the interval of an hour or the thousandth part of a second ; nothing avails but an absolute co-existence. A thought expressed is a sentence, and consists of the attachment to one chief substantive, the subject, directly and incidentally, of various limitations, specifications, qualities, modes, acts, states, etc., themselves variously modified, but all so related as to be capable of an absolute co-existence in the mind. This causes the natural limitation to the length of a sentence. It must not be so long that the mind is unable to retain it till its close, when the various elements may be combined in one. Were thought mere succession, there would be no limit. This is more obviously the case in those thoughts which admit of representation under physical forms, or, to use the comparison so often and so appropriately used, those which may be pictured to the mind. To illustrate, we will take the sentence, “The horse jumps over the fence.” Here we do not think first of a horse, then of a fence, then of the action of jumping, but we think of a horse in a certain act, that of jumping, and this act limited as to place by its relation to the fence. When we conceive of a horse,

it must be in some state, in some position, and the sooner this is limited by the verb the better. What should we say of the painter who, in painting this scene, should first give us a horse, irrespective of the contemplated action, standing in a natural position; then a fence, and then introduce the idea of action? But this can be done only by the obliteration or modification of the capital figure of the picture; yet this same thing is done in employing the so-called natural order in picturing this scene to the deaf-mute. We care little for the order in which the artist places his figures on the canvas; our concern is with the completed picture; and so, in the sign picture, I apprehend that the order in which the figures are presented to the eye and mind affects the facility of conception little, provided the figures are properly given and each one in turn completed before going to another. In any thought presented under physical forms, there is no order of thought, but the completed picture is seen as a whole. Figures which compose the picture may have previously existed in the mind, but the essential conditions which go to make it up are wanting until the last element is given. There is no clear conception till the sentence is complete. There is no picture till the last necessary touch is given. Nor must we rely too much on the supposed order of perception. To recur to the favorite board example: "Suppose I strike a board, I do not strike the vacant air, seeing nothing and having no idea of anything before me until after I have struck, when suddenly a board rises up to receive the blow. I first see the board, I intend to strike it, and with it before my sight I strike. In exact conformity with this necessary order of nature and of fact, in describing this in signs, I say, 'I a board strike.' " The force of this illustration, if it has any, lies in the assumption that this is the "*necessary* order of nature." Suppose, instead, one hits his head against a beam, in the dark; I opine that then this "*necessary* order of nature" is scarcely apparent; on the contrary, he first hits something, which

something he afterwards discovers to be a beam. If we were omniscient, we might assume that the object of action was always apparent previous to the act, but, in the present state of things, we run against a good many beams of whose existence we were not previously aware. Again, "A man found a diamond." Did the man first see, intend, and with it before his eyes, etc.? Or again, "A man shoots a bird." We have to deal with this picture as seen by the speaker. We suppose a man shoots into a flock. The one describing cannot know at what particular bird the man shoots. Or suppose the man shoots at a bird in a tree, which the speaker does not see. What, now, is the "necessary order of nature?" He sees a man, the man shoots, he hits a bird; and, "in exact conformity with this necessary order of nature and of fact, in describing this in signs," he says, "A man shoots a bird." This board illustration, and others that have been cited of a like character, deal with but one class of phenomena, and that a very limited one.

It is said that if the deaf-mute thinks in the inverted order, his language will be in that order. If he thinks in the inverted order, he does it by force of habit only. No good reason, it seems to me, can be given why this order should be used, and yet by some teachers the deaf-mute is encouraged to use it day after day, and made to believe that he must use it in order to master the English language. The mind of a child is very pliant, and he can be taught to do or think almost anything. If you teach him that A is B, he will *think* so till he is told to the contrary.

It is further said that if deaf-mutes continue to use signs in the inverted order, "in spite of all efforts to the contrary," then our argument for the change fails. Our experience is that they will not persist in rendering signs in the inverted order. The system we advocate has not had a fair trial; it has not yet come into general use, although it is gratifying to know that it is rapidly gaining favor. Yet this present inconvenience to which

we are subjected does not invalidate the position we have taken, and cannot reasonably be used as an argument against us.

If "all minds conceive of objects and actions" in the inverted order of the sign-language, it seems very strange indeed that so many other languages ignore this all-essential qualification. But I must not dwell longer on this part of my theme, for there are other points which deserve notice.

In an article favoring the inverted order of the sign-language, I find this passage: "It should be distinctly remembered that words are not only not given in natural signs, but that they are not even suggested."

As a rule, signs must be explained to be understood. We write on the slate the word *horse*, for instance; then we call the pupil's attention to the object, and finally, for convenience, we attach a particular sign for the word. Thus we go on explaining word after word, and attaching the corresponding signs. In this manner the word and its sign become inseparable in the mind of the mute. Is not this true? If you make the sign for the word *horse*, the pupil will spell the word; and if you spell the word, he will almost invariably make the sign for it. Signs, unless they are first riveted to some visible (not visionary) language, are just as useless as the muscles of an arm after the arm has been separated from the body. If the grand object of deaf-mute instruction is to perfect the pupil in the use of the English language, and all admit this, then what benefit is to be derived from using signs that do not even suggest words? And, since words and their corresponding signs are so intimately related to each other, why not render those signs in the same order you would the words could the child hear? I have just as much right to claim that spoken and written language are two separate and distinct languages, having different orders of expression, as to claim a like dissimilarity between the sign and written or word language. What is the difference between the sign and

vocal language? I have yet to learn why there should be any difference. But grant that "natural signs" do not even suggest words, and also that our object is to teach the deaf-mute the structure of our language; then it seems to me the sign-language is no help to us whatever, but a positive injury, and the sooner we discard it altogether and substitute something that will suggest our language, the better for the cause in which we are engaged.

It is claimed that if signs are rendered in the order of English words, deaf-mutes cannot understand them. I would answer this objection as our opponents answer a like objection made against their theory, by giving some practical examples which I have had prepared and intend to append to this article. "But," it is said, "even if your pupils can write a story from signs rendered in the English order, it is all machine work; the whole thing is mechanical; your pupils are automatons," etc. To this I reply, You give deaf-mutes the credit of being able to perform that which you yourselves cannot do. If I were to read to you a passage, do you think you could write it out word for word? And yet that would be no feat at all compared with that which you suppose the deaf-mute can do; for, if he does not understand what we are rendering, then to write it out mechanically would be the same as for you to write out a string of miscellaneous words, bearing no relation to each other, on hearing them read once or twice. There are a few noted instances on record where men have been able to do this, but these are exceptional cases. If a story be rendered in the English order of signs, and the pupils write it out in the main correctly, that is proof enough that they understand it. Besides this direct proof, we have other incidental evidences that we are understood by our pupils. They ask various questions concerning the story; they appreciate the point of the story, and often compare it with other stories they have before heard.

After rendering the following sentence in the inverted order, "A boy catches a cat," it is asked: "Does the deaf-mute not know what it means, and is there any difficulty in his modelling other sentences after this form?" Now, what, I ask, is this "modelling" but a mechanical process? I am willing to submit to the good judgment of my readers as to which is the more mechanical—rendering signs in the order of English words, and requiring the pupil to write out his ideas, or rendering signs in the inverted order, and requiring the pupil to convert them into written language, using a model in the operation.

At the Indianapolis convention, Mr. Porter said: "The main rule, probably, is this: that you must follow the order of pictorial representation—the order by which you can most successfully represent to the imagination what it is that you wish to describe. That, of course, need not always confine us to a single invariable order." He gave this sentence as an illustration: "An old man found a rude boy on one of his trees, stealing apples." He then asked whether we "could get that idea into the mind of a deaf-mute by taking the signs in the order of the words of the English language." Did he not himself answer the question affirmatively? Let us see. He said: "You may begin by picturing first the old man, (an old man,) then the old man finding something, (found,) and then indicate that it is a boy, (a rude boy,) and then you represent the boy as on an apple-tree, (on one of his trees.)" It seems quite natural to follow the English order, after all.

After giving several paragraphs written by deaf-mutes, Mr. Keep says: "We would suggest and invite a comparison of the foregoing versions, in point of variety and correctness of style, with an equal number of similar off-hand exercises of a college class in Latin or Greek, upon a group of ideas given by the professor in rapid extempore talk." The comparison so often made of the English of the deaf-mute with the Latin or Greek of the clas-

sical student is not apposite, for the following reasons: first, it assumes one of the points at issue, viz: that English should be regarded as a foreign language to the deaf-mute pupils of our American institutions; and, secondly, admitting that it should be so regarded, it is, unlike the Greek or Latin, a language in every-day use. It would be more accurate to compare it with the English of an educated foreigner, dependent upon it in daily intercourse, and that, too, without regarding any difficulties in pronunciation on the part of the latter; or, more accurately, it should be compared with the written English of such a foreigner, and that, too, when the writing of English is an habitual matter with him; and this will, we think, be distinguishable from that of a native chiefly by its greater correctness and precision.

It is said that if we admit that signs rendered in the inverted order have the power to give clear ideas on such subjects as children would be interested in knowing and are capable of understanding, then we "shut ourselves up to the absurdity of saying that a perfectly clear idea of the thoughts contained in a sentence may be communicated to the mind, yet the sentence itself, as given in signs, not be translatable into verbal language." Remarks concerning the above would seem to be uncalled for, for does not the author shut himself up to this same absurdity, when he says, (*Annals*, vol. xvi, page 23 :) "A language, it is well known, may be understood and read, when there is no ability whatever to express one's thoughts in it?"

It is asked how we may secure from our pupils the greatest possible use of language. I know of no better way than to require our pupils to *use* language as much as possible. I would use signs cautiously and sparingly, and depend upon written language and dactylology in communicating with our pupils. If deaf-mutes have really acquired an order antagonistic to the English, I would get them out of that rut as soon as possible; and I would have our pupils appreciate the great importance to them of mastering our language.

We are accused of being ignorant of the sign-language, and this is given as a reason why we complain of its inversions and desire its reconstruction. I deem this a strange argument for our opponents to use, and only demonstrative of the weakness of their cause. So far as I am concerned, I make no claims as an expert; but, in behalf of others who oppose the theory of inversions, I would say that they are numbered among the finest sign-makers in this country. This is a well-known fact.

Another objection to our theory is, that it does not give exercise to the judgment. As has been so often stated, the first and chief object of deaf-mute instruction should be the mastery of the English language. The deaf and dumb acquire this, at best, under great disadvantages, and they certainly should not be required to bear any additional burden. What should we say of the educator who proposed to teach the speaking child two distinct languages, and "throw him upon his own resources and judgment in giving to each language its proper character?" The sensible parent would object that he thought it better for his child to acquire *one* language first, and then there would be time enough to gain the "important incidental advantages" of learning a new language.

It is asked how the deaf and dumb may be induced to use this changed sign-language. Says one: "Teachers may use it in school, but who is to secure its use by the deaf and dumb out of school?" If we can secure its use in the school-room—and I know this can be done—then our object is in the main accomplished. They will, however, I am confident, discard the use of signs in the inverted order altogether. The change may be gradual; but as they become accustomed to the English order, and daily familiarize themselves with it, they will eventually prefer to use it. Discourage them from using, instead of encouraging them to use, the inverted order, and we need have no fears but that they will soon abandon the habit.

It is a wonder to me that some members of our profession so strenuously advocate the use of the sign-language

at all times, when its imperfections are so generally admitted. I do not now refer to any special order in which it is used. One gentleman, who so earnestly urges the claims of the sign-language, says: "Trains of reasoning are not at home in signs. The range is that of partially-developed minds of children. There is, of course, a wide gulf between such a language as this and the cultivated and refined languages of the world." By using such a language as above described there cannot be a very great opportunity for the exercise of the judgment. Again, the same writer says: "As things are, the object being to bring the pupils of our institutions at the earliest practicable time to the use, and exclusive use, of English, it is doubtful whether the sign-language will ever be much farther advanced than it now is."

In an able article (*Annals*, vol. xvi, page 171) written by Mr. Angus, himself a semi-mute, I find the following: "After the sign-language has served the purpose for which we employ it, its continued use retards, if it does not render impossible, the more complete mastery of the common language which it is one of our chief purposes to have the deaf-mute acquire." Further on in his article, Mr. Angus says, in substance, that in early times educated deaf-mutes, after leaving school, were compelled, on account of the smallness of their numbers, to depend upon common language either in writing or dactylology, and hence they became more familiar with it; but that graduates of the present day, being many, have abundant temptation and opportunity to retain the sign-language, and develop a sort of clannishness that renders their continued improvement in language after leaving school nearly impossible. He further says it is desirable that deaf-mutes be afforded this source of pleasure, but to be regretted that it retards their progress in language. Mr. I. L. Peet says: "As far as this, [seven weeks in an institution,] the intelligent parent, by painstaking, could have taught the child at home without the intervention of signs—a fact which furnishes a strong presumption in

favor of this being the natural and best order of initiating the deaf-mute into the study of the English language."

It would seem, then, that the sign-language is not only not perfect, but that it is an inferior language, and that a "wide gulf" exists between this and the English language, since the latter is one of the "refined and cultivated" languages. It is further acknowledged that this language will never be much farther advanced than it now is. By Mr. Angus, the continued use of the sign-language is claimed to be positively injurious to those desiring to improve in the use of English. Mr. I. L. Peet is of the opinion that parents may teach their deaf-mute children all that they would get by two months' instruction in an institution, and after that time, he says, the teacher "may avail himself of the assistance which signs give in interpreting the meaning of words." In view of the above and abundant other testimony, was not Dr. Gallaudet justified in saying that the sign-language "is a very dangerous thing," and that we should use it "as little as possible?" Signs render valuable assistance in instructing the deaf-mute in language, provided they be carefully and properly used; otherwise they are injurious. Of this there can be no question. We base our assertion on statements made both by our friends and opponents, and on the testimony of deaf-mutes themselves. It may be asked what this has to do with the main question under discussion. Simply this: if the sign-language is acknowledged to be an inferior and deficient language, incapable of expressing thoughts beyond the grasp of children, and if the excessive use of this language is shown to be positively injurious, then we are justified in protesting against its being placed on an equality with the English language. In short, the sign-language is a dependent and subordinate language, and should be so considered.

I had hoped to add to this essay a few practical examples, going to show that deaf-mutes can be successfully instructed by the English order; but as my article is

already much too long, I will omit them; yet shall be most happy to show the work of my class at any future time.

In conclusion, allow me to quote two paragraphs in sympathy with my views. They well answer the question proposed at the head of this article.

Says Dr. Gallaudet: "I see nothing to be gained by the inverted order, as it excites in the minds of deaf-mutes something that is constantly fighting against the work of instructing them in the use of the English language. We had far better work a little harder, and reach the mind of the pupil in the order of thought that he has to use in his general contact with men."

Says Mr. Gillet, of Indiana: "Why should we teach language to the deaf, as we do not teach it to our children, as we did not learn it ourselves, as all the generations of men did not learn it? Why except them from the universal system of all times and all nations? Deafness does not alter the nature of the mind, nor change its modes of activity."

A FEW WORDS ON TEXT-BOOKS, ETC.

BY WILLIAM H. LATHAM, M. A., INDIANAPOLIS, IND.

SEVERAL papers* have been called forth, in part at least, by an article which appeared in the *Annals*, vol. xv, page 104, entitled "Difficulties Attending Deaf-Mute Instruction."

Exceptions were taken to the article, more especially to the hypothetical statement therein made, that the teachers of a former date were more efficient than those of the present day; and to the deduction thence drawn that the text-books of late years so generally in use were of

* "Progress in Deaf-Mute Instruction," by H. P. Peet, Ph. D., LL. D. (*Annals*, vol. xv, page 209.)—"A Practical View of Deaf-Mute Instruction," by Isaac Lewis Peet, M. A. (*Annals*, vol. xvi, page 69.)—"We Are Not Retrograding," by W. W. Angus. (*Annals*, vol. xvi, page 160.)

doubtful utility, inasmuch as this greater success was achieved without the aid of these books.

As to the question whether former teachers did excel those of the present time I have nothing to say. When I ventured the hypothesis, I did not believe that such was the case, nor do I now believe it, for I have no means of knowing. I leave the question to be settled by those more particularly interested, who are doubtless fully competent to the task.

My sole object in writing the paper was to show that there were good and sufficient reasons why the teacher would not accomplish all he might desire, or all that might be expected of him. I have, as yet, seen no reason to recede from any position therein taken, or to modify the opinions therein expressed, but rather to confirm them.

The same difficulties, both theoretical and practical, exist now, as then; and the same obstacles, more clearly defined it may be, lie in the way of the greatest success. The question naturally arises, without drawing any comparisons, Are we really advancing, as we ought to be, in the theory and practice of deaf-mute instruction? Is our progress such as to warrant the discontinuance of all further effort in the way of advancing the true interests of the deaf-mute?

I, for one, am not willing to admit that the ultimatum has been reached, nor that *finis* has been appended to all text-books, without the chance of addenda, supplement, or errata. In my former article, I referred not so much to the text-books now in use, as to the want of proper books to supply the place of our chaffy common school-books in our more advanced classes. Yet I trust I may be allowed to express my opinion as to the merits and utility of the text-books so long and so generally in use, and to which all of the above-named writers refer, and upon which they lay such particular stress. Should a book which may have the precedence in point of time, and which may have had a commendable degree of suc-

cess, preclude the possibility of any better book being made? Should a system of instruction pursued by a principal, however *expert*; be insisted upon, without a thought that some other mode of tuition may be equally, if not more, efficient? Should public opinion be forestalled, and all debate cut off upon a question of such import?

That we, as teachers, are not accomplishing all we might desire, and that there are defects and hindrances somewhere in the way of attaining this greater good, no one can deny. In my former paper I hinted at some of these obstacles; and I trust I shall be excused if, in the present instance, I take a wider view of the subject, even if it may seem to conflict with preconceived notions and opinions. And if my idea was not then fully comprehended, I would now give forth no uncertain sound. I stand committed to no theories and to no system of instruction, so called. My opinions are serious convictions, the result, as before said, of my own observation and experience in the school-room.

The writer of the first-named paper, while he is not willing to admit the superiority of former teachers, seeks to throw off the onus from the text-books in question upon the "mediocre teachers," who, as he intimates, are not competent to their "proper use."

The writer of the second paper would hold the rod over the teacher, and, if he failed to follow instructions, would dismiss him. How could we expect any but "mediocre" teachers under such a *régime* as this? Must the teacher lose his individuality? Must he become a mere automaton, to be wound up and set agoing like a clock?

I believe in system, but not in mere routine, as here set forth and inculcated. I do not believe in following a beaten track, though guide-boards be set up, and though the path be smooth and easy, if, by stepping aside, we may gather fruits more appetizing and more wholesome. I believe that a teacher of ripe experience is as competent

to decide what is best in particular exigencies as a principal, though he be an *expert* ; and I ask, in all sincerity, will not the same rule which the writer applies to the teachers apply with equal propriety to the principals of our institutions? There are teachers who have continued such not altogether from necessity, and who have sought to perform their duties zealously and faithfully. Shall such teachers be condemned, forsooth, because they may have deviated from the beaten path, and dared to think and act for themselves?

To return to our text-books. Is it not a little singular that there should be such a uniformity of errors with the deaf-mute that they are designated as *mutisms*—that the teacher of the more advanced classes should be called upon from year to year to correct the same stereotyped edition of blunders, especially when there has been such a diversity of teachers? Is this defect owing to any peculiar mental condition of the deaf-mute, or is it owing to the imperfect mode of instruction based upon these text-books? As before said, no two teachers pursue precisely the same course. The same books have been used from year to year, and doubtless properly used. Why, then, these defects, if they are not traceable to the inherent defect in the mode of instruction, as commonly pursued in our schools? I do not, of course, forget those extraordinary instances of success to which every teacher of extended experience looks back, I doubt not, with as much complacency as the venerable writer of the first article named, or his worthy successor. There are pupils, nay classes, who will learn despite the text-books or the teacher, be he as dull as he may. These, however, are exceptional cases—bright oases in a desert of dullness. I refer to the great mass of deaf-mutes, who have to be lifted up, step by step, with untiring effort on the part of the teacher. *Hoc opus, hic labor est!*

Does the teacher here accomplish what he might, and is the deficiency owing altogether to the teacher? I think not. Do the text-books now most commonly in

use meet the desired end, in the estimation of teachers generally; and is the system of instruction based upon the principles set forth in these books, especially in the earlier period of the course, the best? These are questions in which every conscientious teacher of the deaf and dumb is interested, and questions, too, which should be regarded above all personal considerations.

The books to which I more particularly refer have had a fair and impartial trial; their merits have been most fully set forth from time to time, and I am confident they have been properly used. Do they accomplish all that is claimed for them? Were I permitted to criticise these books, I should say their principal defects were *verbiage*, or a plethora of words, unimportant phrases, and formulas; that their arrangement was illogical and arbitrary; and that their use, even their proper use, was calculated to engender and foster idioms or mutisms.

The author, in common with those of all elementary books with which I am conversant, seems to proceed upon the idea that a large vocabulary of names and qualifying words should be memorized at the outset, as a sort of stock-in-trade, to be drawn upon as the pupil advances. And in furtherance of this idea the writer of the second paper refers us back to our great progenitor, as his authority for adhering to this plan. As much as distance might lend enchantment, I must confess I cannot go behind Adam for a precedent. He adheres to the system based upon this idea because it has the advantage of *experience*, and he would have no innovations. What improvements have ever been made without innovations?

I consider the idea a mistaken one, involving not only a loss of time and a waste of labor both on the part of teacher and pupil, but as detrimental to the best interests of the latter. There is no difficulty in the way of the pupil's learning words. He runs, as it were, to words, and the teacher has constantly to fight this tendency. Why not utilize words at the outset? Why is it not as easy for the beginner to learn understandingly the prop-

osition, *A cat catches a mouse*, or, *A cat licks milk*, (I care not whether the cat be black or white,) as to memorize the disconnected words, *cat, dog, horse*? And, if he can do this, which I fully believe, would it not appear far more reasonable and economical to adopt this mode of tuition—making the simple sentence, consisting of subject, predicate and object, the starting-point of the process; modifying and enlarging the proposition as the pupil progresses? I believe that qualifying words and the varied adjuncts of the sentence would be more readily and more understandingly learned in this way than in any other.

Even if the process seemed at first more difficult, would it not be advisable? *Habit* with the mute is everything, and, if he be set to utilizing material at the start, to writing propositions and connected language, be the process never so difficult, who will venture to say that in a given time he will not have learned a series of sentences and every-day phrases as a part of the warp and woof of his more complete education? His attainments will not be measured by the number of pages he may have gone over in the Elementary Lessons, but he shall be able to write a connected composition; while in the usual mode his slate would have been filled with disconnected words, *crooked sticks, long benches, et id omne genus*. I think pupils have altogether too many of these long forms.

To say that this process involves the use of the *verb*, and is therefore impracticable, is a *petitio principii*. What is the verb but the name of an action, and oftentimes more significant to the mind of the pupil than the name of an object? Even if, as the venerable writer intimates, (note 12, Dr. Peet's Elementary Lessons,) an "earlier introduction of the verb enhances the difficulty," why not at once put forth the effort and overcome the difficulty?

We all know that, as pupils are now taught, the verb, with its varied forms, is the great stumbling-block in the way of the deaf-mute. This idea of the author hardly seems consistent with the directions to parents, which we

find in his Twenty seventh Annual Report, pp. 27, 28, and 29. There he advises parents to teach their children before coming to school, not only *verbs*, but *sentences*, such as *Feed the pig; Call father to dinner; Uncle John will come to-morrow; I will give you some apples*, etc., and he says this will be no very difficult task. Furthermore, he states that the deaf pupil thus taught at home "*will far out-strip*" one of equal capacity who has not been thus taught. Is not this virtually an admission of the point at issue? The writer certainly could not mean that the parent at home can accomplish what the teacher cannot do in the school-room, with the aid of the Elementary Lessons!

It would seem, however, by reference to note 12, that "some very respectable teachers" had introduced the verb much earlier. It has been a question with me whether these same "respectable teachers" were not those who had had the greater success at a former day.

I also hold that the author of the Elementary Lessons, in common with others, commits an error in introducing the verb under the form of the participle, for the reason, as he says, that "the participle forms a connecting link between the verb and the adjective." This may be a logical deduction, but it is wrong in theory as regards the instruction of the deaf-mute.

The participle thus taught acquires the primary signification of the verb, and as such, by constant repetition, fixes itself in the mind of the pupil, and becomes a fruitful source of one form of stereotyped blunders.

For example, the author, it may be, gives the picture of a boy in the act of shooting a squirrel, and so designates it. The act, as represented in the picture, is precisely the same as he sees performed at home by his brother; and as the verb *is* subsequently becomes joined with the participle, as the "present actual tense," the pupil, in describing the act, writes, *My brother is shooting a squirrel*, for he has thus been taught to write FROM THE BOOK. It is no easy matter to correct this *idiom*, as all teachers will admit. I have had repeatedly to correct this same

mistake in a class of *seven years'* standing. It may be said that the pupil ought to know better. He does know better, but the habit has become fixed from early tuition, as every teacher of the older classes knows to his sad experience. Whence this idiom and others depending upon it?

In the first place, to the pupil, as he writes, all action is before the mind as present action, and he, without thinking, so expresses it. This is evident enough. We turn to the Elementary Lessons, and we find that present action is designated by the present participle *in extenso*. The pupil has thus learned it. We visit a class-room of beginners, taught *secundum artem*, and we find their slates filled with present participles, day after day; and the form of expression thus assiduously taught becomes a fixed mental habit with the pupil. I have often had whole exercises carried through with the present actual tense, and can account for the *idiom* in no other way.

A boy was shot a squirrel, past action, a form of expression with which all teachers are familiar, is a legitimate logical sequence of *A boy is shooting a squirrel*, present tense, the *rationale* of which appears simple enough; *was* is the past of *is*, and *shot* the past of *shooting*. If it requires the combination of *is shooting* to designate present action, *was shot* is necessary to designate past action. Further than this, the verb *is*, by this association with other verbs, loses its distinctive character, and becomes a mere adjunct, and it is with great difficulty that it can afterwards be taught in its true sense. The experience of older teachers will bear us out in this assertion. Need we wonder whence come mutisms?

Had the author, in describing the act, used the verb in its primary meaning, as he should have done, and said *A boy shoots a squirrel*, he would have been correct, grammatically and practically. The word *shoots* is strictly descriptive of the act, and the pupil, having so learned it, would use it correctly, and the idiom be avoided. Let the participle be taught as a modification of the verb, and not the verb as a modification of the participle.

Are mutisms necessary in the abstract, or in practice? Are they natural to the deaf-mute, or are they acquired? If natural, why so? If acquired, in what way acquired? Is there any more necessity for the deaf-mute, if correctly taught, to use idioms, than for speaking persons to use vulgarisms, or inaccuracies of expression? Are not both alike the result of habits acquired in early life?

The speaking person, if he is accustomed to hear correct language, will use such language from habit; while, if he becomes familiar with vulgarisms, or crude expressions, they will become part and parcel of his vernacular, so much so, that we can designate the place of his nativity by his speech alone, and no subsequent effort can wholly correct this habit. I hold that the same is pre-eminently true of the deaf-mute; that idioms acquired in the earlier part of his pupilage will cling to him as a part of his mental fabric, and that the most persistent effort of the teacher can never wholly correct these defects.

Do not some teachers, proceeding upon the supposition that mutisms are the necessary result of the peculiar mental constitution of the mute, encourage this defect by their mode of instruction?

Starting out with the idea that the deaf-mute thinks in natural signs, or inverted English, they would seek to conform their teaching to this idea, and because, forsooth, the pupil thinks backward, they would teach them language backward by their use of natural signs; thus encouraging and confirming the pupil in this mode of thought.

Great stress is laid upon proficiency in the sign-language, as though it, alone, were the means of the pupil's greatest advancement. One writer even goes so far as to say directly, that "with the aid of these books, [Dr. Peet's Elementary Lessons,] these teachers, [deaf-mutes,] through their perfect command of the language of signs, have succeeded, during the first years of a deaf-mute's school life, in communicating ideas, and securing a development of the mental and moral powers, which the

best hearing teacher could not have accomplished in the same time." Here, of course, it is proficiency in the natural sign-language alone that accomplishes so much. Admitting all that may be said of the beauty and dignity of the sign-language, what are natural signs in their legitimate use but the means by which we reach the mind of the uneducated deaf-mute, and convey ideas to his mind more conveniently than we otherwise could?

Do natural signs convey to him our language? Not at all. They are only a mode of interpretation of our language, and are even not absolutely necessary for this, for pupils are now taught in some schools without the intervention of signs. Farther than this, natural signs are not only useless, but are positively injurious, and the more a teacher conforms to the pupil's mode of thinking, by the use of signs, the more he hinders the real progress of the pupil in the acquisition of correct written language. As a general rule it may safely be said that the more proficient a pupil is in the use of natural signs, the less likely is he to become well-versed in written language; and may it not with equal propriety be said that the more skilled a teacher is in the sign-language, the more will he rely upon it as a means of instruction, and the less will he really accomplish. The question is not how the pupil shall acquire ideas or moral truths, which we know he can in the main gain through the sign-language alone. These are not the test of his proficiency. The question in which we are more interested is, how shall he best learn the *English language* in its purity and simplicity?

To accomplish this we are to use all the aids and facilities we can command—object lessons, natural signs, methodical signs, but mainly the plain written language, directed to the eye first, last, and all the time. The use of natural signs farther than I have intimated I consider positively detrimental to this purpose. If signs are deemed necessary more than this, let them be made in strict conformity with the written language, word for

word. What if, as some suppose, the pupil cannot at first comprehend the relations of word signs? It should be the end and aim of the teacher to bring the pupil up to this point, and the sooner he begins the better. It may at first be a matter of sight, of repetition, of practice, but the practice will make the process familiar and easy, and here I have been led to think that the teacher sometimes underrates the ability of the pupil, and makes the pupil responsible for his own errors.

Is it not more in consonance with reason, and will not experience prove, that a pupil will learn more readily and understand more fully a plain proposition written out, and explained by word signs, than a sentence dictated by natural signs which he is required to interpret and write out himself? Shall the teacher conform his instruction to what he supposes to be the mental status of the deaf-mute, and further cramp and distort the unformed yet ductile mind of the pupil, and seek to confirm him in this habit; or shall he at once endeavor to bring him up to the correct standard of the written English language? It matters not how the pupil thinks; he is to be made to think as we think, and to write as we write.

The speaking child learns the language by hearing every day familiar expressions. So I would have the deaf-mute learn the pure, simple, natural language. I would have no peculiarities, no crude, uncouth, disjointed, useless phrases, no wresting of the language in the book, or on the slate, for the sake of some new word or phrase, as is too often the case. I would, if possible, never have the pupil see a sentence, much less teach him to write one, which should not be grammatically and strictly correct.

Written language is only to be learned by a constant, unwearied repetition of word upon word, and sentence upon sentence; but let these words and these sentences always be written in pure, natural, unmistakable English.

MISCELLANEOUS.

BY THE EDITOR.

The Tabular Statement of the Institutions.—Four institutions appear for the first time in our list this year, viz: Whipple's Home School, the Chicago Day School, the Oregon Institution, and the Cleveland Day School; making the whole number now existing in the United States thirty-eight. The Mississippi Institution, which had been closed since 1864, has been reopened. The Chicago Day School was probably broken up by the great fire, as the circulars requesting information regarding it, which were sent to the principal, have received no response. Steps have been taken toward the organization of a day school in Cincinnati, but the school will probably not be opened until next autumn. Articulation and lip-reading are the means of instruction in Whipple's school and the two day schools; signs and the manual alphabet, we think, in the Oregon and Mississippi institutions.—The table shows an increase of 284 in the number of pupils in attendance over the number of the year previous, and an increase of 38 in the number of teachers.—The table gives what has never been presented before, the number of semi-mute pupils in each institution, and the number of semi-mute teachers—information which we believe will be of interest to our readers, and of value in connection with the question of teaching articulation. The whole number of semi-mute pupils is 421, which is about thirteen per cent. of all the pupils.* The proportion differs so much in different institutions that it seems as if there must have been a different standard in making the estimates; as, for instance, where the New York Institution, with 580 pupils, reports but 35 semi-mutes, while the Indiana Institution, with 269 pupils, reports 38, and the Ohio Institution, with 388 pupils, reports 36. Similar disproportions are apparent in the statistics of some other institutions. The institution at Buffalo, N. Y., which has 25 pupils, and the Catholic Male Institution at Montreal, Canada,

which has 75 pupils, say they have no semi-mutes—statements which we are confident must have been made in misapprehension of the meaning of the term, especially as the principal of the latter institution writes that 27 of his pupils learn articulation with success. We know how difficult it is in many cases to draw the line precisely between deaf-mutes and semi-mutes, but we hoped the standard suggested in the circulars requesting information, that the term semi-mute should include the semi-deaf and all the deaf who had acquired some knowledge of language through the ear, would lead to uniformity in the reports. It may be, notwithstanding the variety of proportion mentioned, that the standard really was nearly uniform; the variety of proportion in this respect is not greater than in that of the relative number of the male and female pupils in different institutions—a fact, by the way, of which we have never seen any adequate explanation, though various theories have been suggested. The proportion of semi-mutes is larger, as might have been expected, in the Clarke Institution than in any other.

The Michigan Institution.—For several years it has been the custom in this institution to have the annual examination at the close of the term conducted by some distinguished gentleman from abroad, familiar with the methods of deaf-mute instruction, assisted by a committee of residents of the state. Dr. Turner, of Hartford, and Dr. Thos. Gallaudet, of New York, have thus acted as chief examiners in previous years; last year Professor George E. Day, of Yale Theological Seminary, performed this service. Professor Day's former experience as a teacher of the deaf and dumb, added to his eminence as a scholar and man of letters, peculiarly fitted him to serve in this capacity. The presence of such a man at the examination and closing exercises of the school has the double effect of stimulating the zeal and enthusiasm of teachers and pupils in the labor of the year, and increasing the interest of the community in the work of the institution.

Death of Mr. King.—It is with regret that we announce the death of the Hon. Dexter S. King, the founder of the Boston school for deaf-mutes. He died at his residence in Boston on Thursday, July 27, of Bright's disease, at the age of sixty-five. In early life Mr. King was a teacher, and afterwards a clergyman of the Methodist Episcopal Church ; of late years, compelled by ill-health to abandon the more arduous duties of his profession, he still labored to the extent of his ability for the good of his fellow-men. While a member of the Massachusetts legislature in 1868, he became interested in the deaf and dumb, and, impressed with the successful results achieved at the Northampton institution, exerted himself to have an articulating school established in Boston as a part of the city school system. His efforts in this direction were successful, and he was the first chairman of the committee of the board which directed the affairs of the school for the deaf and dumb. Though his official connection with the school was soon dissolved, he continued its most active friend, visiting it daily, encouraging the teachers and pupils, and enlisting the sympathy of the community in their behalf. It was through his influence that Mr. A. G. Bell was chosen a teacher in the school, and an opportunity thus afforded of trying the new experiment in the method of instructing the deaf and dumb in articulation, which is explained in detail in an article by Mr. Bell published in the present number of the *Annals*.—Mr. King had other plans for the benefit of the deaf and dumb, besides those carried into execution in the establishment of the Boston school. Some of these plans were doubtless visionary ; but they were earnest and disinterested. The Boston school remains a worthy monument to his genuine kind-heartedness, philanthropy, and enterprise.

The Hull Homicide.—Charles Sleight, the teacher of the deaf and dumb at Hull, of whose dreadful act we gave an account in the last April number of the *Annals*, has been tried, and acquitted on the ground of insanity. It was not proved on the trial that he had borne any

malice against the victim or her husband, or that there had been any previous attempt at outrage; and it was proved that insanity prevailed in his family, his brother having committed suicide, and his niece, uncle and aunt having been confined in lunatic asylums. It was also shown that he himself had shown some signs of unsoundness of mind. He was ordered to be confined during her Majesty's pleasure.

The Census of 1870.—An article in the *Minnesota Teacher* for June, by Mr. J. L. Noyes, Superintendent of the Minnesota Institution, complains of inaccuracy in the new census, in the returns relative to the deaf and dumb and the blind of that state. A similar complaint of the returns in Louisiana was made by Mr. McWhorter in the last report of the Louisiana Institution. Mr. Noyes has reason to think that as many as one-third of the deaf and dumb of Minnesota under ten years of age are not so returned, and that in many cases no returns are made of the semi-deaf and semi-mute, who, for educational purposes at least, should be classed with the deaf and dumb. Dr. Peet, in an article on the statistics of the deaf and dumb, published in the *Annals* some years ago, (vol. v, page 14,) estimated that probably one-half or more of the deaf-mutes under ten years of age were unrecognized or overlooked in the census of 1850. From the statements of Messrs. Noyes and McWhorter, referred to above, and from a comparison of the estimates made by some other principals of institutions with the returns from their several states, we fear the new census is not more accurate in this respect than its predecessors. Probably it is impossible, for the reasons assigned in Dr. Peet's article, to obtain entirely correct returns.—We copy from the December number of the *Silent World* some statistics of the deaf and dumb, taken from advance sheets of the census report. It will be seen by comparing the numbers of those who are of proper school age with the numbers in the several institutions during the past year, as shown in the tabular statement published elsewhere in the present number of the

Annals, that, even if the census returns do not fall much short of the facts, there are in the United States many deaf-mutes of suitable age who are not receiving an education.

STATES.	Total.	White.	Colored.	Male.	Female.	School Age, 5 to 20.
Alabama.....	401	262	139	205	196	180
Arkansas.....	265	236	29	142	123	132
California.....	141	139	2	79	62	97
Connecticut.....	221	217	4	117	104	84
Delaware.....	61	54	7	34	27	15
Florida.....	48	32	16	29	19	30
Georgia.....	326	237	89	168	158	155
Illinois.....	833	823	10	484	349	417
Indiana.....	872	865	7	467	405	468
Iowa.....	549	548	1	315	234	257
Kansas.....	121	114	7	72	49	61
Kentucky.....	723	634	89	365	358	320
Louisiana.....	197	154	43	105	92	73
Maine.....	351	351	.....	186	165	125
Maryland.....	384	311	73	229	155	198
Massachusetts.....	656	651	5	376	280	313
Michigan.....	455	454	1	258	197	207
Minnesota.....	166	165	1	99	67	110
Mississippi.....	245	134	111	145	100	99
Missouri.....	790	751	39	389	401	436
Nebraska.....	55	55	.....	22	33	24
Nevada.....	4	4	.....	2	2	4
New Hampshire.....	188	188	.....	103	85	54
New Jersey.....	277	268	9	145	132	119
New York.....	1,783	1,768	15	984	799	748
North Carolina.....	619	442	177	358	261	289
Ohio.....	1,339	1,323	16	709	630	653
Oregon.....	23	22	1	13	10	11
Pennsylvania.....	1,433	1,425	8	777	656	654
Rhode Island.....	71	69	2	47	24	28
South Carolina.....	212	122	90	118	94	103
Tennessee.....	570	476	94	304	266	243
Texas.....	232	185	47	146	86	110
Vermont.....	167	167	.....	88	78	56
Virginia.....	534	401	133	298	236	232
West Virginia.....	218	214	4	125	93	79
Wisconsin.....	459	459	.....	276	183	280
Total.....	15,933	14,713	1,270	8,780	7,203	7,454
TERRITORIES.						
Colorado.....	4	4	.....	1	3	3
Dakota.....	4	4	.....	2	2	3
District of Columbia...	134	108	26	92	42	70
Idaho.....	1	1	.....	1	.....	.....
Montana.....	5	4	1	1	4	2
New Mexico.....	48	48	.....	30	18	16
Utah.....	18	18	.....	4	14	9
Washington.....	6	.....	.....	3	3	4
Wyoming.....	2	1	1	2	.....	1
Total.....	222	194	28	136	86	108
Grand total U. S....	16,205	14,907	1,298	8,916	7,289	7,562

The Census of 1840.—Mr: Edmund Booth, in an article entitled “Early Education of Iowa Mutes,” published in the *Annals of Iowa* for October, 1871, mentions a fact that will probably be new to most of our readers, though doubtless recollected by some of them, viz: that in the census of 1840 the returns were so perverted in the interests of slavery as falsely to show that a far greater proportion of the free blacks of the North suffered with various physical infirmities than the slaves of the South; and that for this purpose many white deaf-mutes were recorded in the census as colored, and afflicted with divers calamities besides deafness. Thus Mr. Booth himself, who had formerly been a teacher in the American Asylum, and two other intelligent deaf-mute residents of Jones county, Iowa, also graduates of the American Asylum, found themselves recorded in the census as “deaf, dumb, blind, idiotic, insane, and colored!”—It was through Mr. Booth’s influence, as we learn from this article, that the first steps were taken by the state of Iowa toward the education of her deaf-mute children.

The Next Convention —We have received some inquiries with regard to the time and place of holding the next convention of American instructors of the deaf and dumb, some of our correspondents having the impression that the convention was to be held the coming summer. This is a mistake, as it was voted at the Indianapolis convention that the next convention should take place in 1873, the precise time and the place being left to the Executive Committee of the *Annals*, President Gallaudet, chairman, to whom all invitations and suggestions should be addressed. We are not aware that any formal invitations have yet been received by the committee, though several places were suggested by their respective representatives at the Indianapolis convention. Besides these, the California Institution, as we are informed by Mr. Wilkinson, will probably invite the convention to enjoy its hospitality. An arrangement could probably be made for dele-

gates to go and return at much reduced fare, and an opportunity thus be afforded our teachers to visit this wonderful sunset land under peculiarly favorable circumstances.

The American Asylum Thirty-five Years Ago.—The quaint and pleasing diary of "A Virginian in New England Thirty-five Years Ago," edited by James Russell Lowell, and published last year in the *Atlantic Monthly*, contains the following notice of a visit to the American Asylum :

"HARTFORD, Sunday, July 6.

* * * "After tea (which was at 6) Mr. Sigourney proposed to attend me to the Deaf and Dumb Asylum, and introduce me to the principal, that I might more conveniently find access to-morrow. Went. It is not above a hundred yards or so from Mr. S.'s. Miss Peazlee, the matron—whom I called Miss Beazley—and Mr. Weld, the principal—I called him Mr. Wells. Julia Brace, deaf, dumb, and blind. Her clothing, mostly made by herself. Laurent Clerc, a polite Frenchman, (a teacher,) deaf and dumb, and so is his wife; yet their children not. One of them is a blooming, beautiful daughter of sixteen. 'This,' said Mr. S., 'solves an interesting problem in Physics.'

"HARTFORD, Monday, July 7.

* * * "To Deaf and Dumb Asylum again. Miss Peazlee and Mr. Weld. Prayers about to be held in the chapel—we were invited in. A text explained, and prayer uttered, entirely by signs of the hands, fingers, and eyes. Asked Mr. Weld if in his exposition and prayer he had spelled words on his fingers? 'Oh, no!' (with a look of some chagrin at my supposition.) 'I did not make a single letter. The signs express *ideas* only.' He then ran over some of them to me. The Asylum has 133 pupils or patients—57 girls; 127 were at prayers.

"Witnessed the morning's instruction given to two classes: 1st, Mr. Clerc's, and 2d, Mr. Turner's, in whose absence Mr. Weld has it in charge. Examination on Saturday's lesson. During these exercises, and at the prayer, the pupils' faces indicated wonderful depth and fixedness of attention. There was legible, too, in their looks, the highest love and respect for Mr. Weld. Many very intelligent countenances. Those aged from twelve to sixteen learn the best. Adults, usually with difficulty—exception, one young woman of twenty-five or twenty-six, from Wethersfield. Their writing extremely plain and exact. Term of stay, four years. Deaf-muteness sometimes superinduced by disease and hardship: not always from birth. Alms-box for Julia Brace."

AMERICAN INSTITUTIONS FOR THE INSTRUCTION OF THE DEAF AND DUMB, JANUARY 1, 1872.

	NAME.	LOCATION.	Date of opening.	CHIEF EXECUTIVE OFFICER.	Number of Pup- ils in 1871.	Male.	Female.	Semi-Mute.*	Number of Teachers.†	Male.	Female.	Deaf-Mute.‡	Semi-Mute.§	SCHOOL HOURS.	EVENING STUDY HOURS.	SCHOOL YEAR BEGINS.	SUMMER VACATION BEGINS.	TRADES.
1...	American Asylum.....	Hartford, Conn.....	1817	Edward C. Stone, M. A., Principal.....	292	181	111	20	17	10	7	5	2	9 to 12 and 2 to 4.....	7 to 8½.....	Second Wed. Sept.....	Last Wed. June.....	Cabinet-making, shoe-making, and tailoring.
2...	New York Institution.....	New York, N. Y.....	1818	Isaac Lewis Peet, M. A.....do.....	580	311	269	35	30	18	12	7	10	8 to 1.....	7 to 10.....	First Wed. Sept.....	Last Wed. June.....	Cabinet-making, horticulture, painting and glazing, shoe-making, tailoring.
3...	Pennsylvania.....do.....	Philadelphia, Pa.....	1829	Joshua Foster.....do.....	272	151	121	39	13	11	2	3		8½ to 11½ and 2½ to 1½.....	7½ to 8½ and 10.....	First Wed. Sept.....	Last Wed. June.....	Shoe-making and tailoring.
4...	Kentucky.....do.....	Danville, Ky.....	1823	J. A. Jacobs.....do.....	83	48	35		6	4	2	3	1	8 to 12 and 1½ to 3.....	7 to 9.....	October 1.....	August 1.....	Gardening.
5...	Ohio.....do.....	Columbus, Ohio.....	1829	Gilbert O. Fay, M. A., Superintendent.....	388	227	161	36	21	9	12	10	1	7½ to 9½, 10½ to 12½, 2 to 5½.....	7 to 8, 8½ and 9.....	Second Wed. Sept.....	Third Wed. June.....	Book-binding, printing, and shoe-making.
6...	Virginia.....do.....	Staunton, Va.....	1830	Chas. D. McCoy, Principal.....	92	47	45	2	6	6			1	8½ to 1½.....	7 to 9.....	First Wed. Sept.....	Fourth Thurs. June.....	Cabinet-making and carpentering, printing in raised type and book-binding, shoe-making, tailoring.
7...	Indiana.....do.....	Indianapolis, Ind.....	1841	Rev. Thos. MacIntire, M. A., Sup't.....	269	142	127	38	14	8	6	3	3	7½ to 1.....	7 to 8½.....	First Wed. after Sept. 15.....	Last Thurs. June.....	Cabinet-making, shoe-making, and tailoring.
8...	Tennessee School.....	Knoxville, Tenn.....	1845	Joseph H. Jams, B. A., Principal.....	113	65	48	10	8	7	1	3		9 to 12 and 2 to 3½.....	7 to 9.....	Middle of Sept.....	Middle of June.....	None.
9...	North Carolina Institution.....	Raleigh, N. C.....	1845	S. F. Tomlinson, B. A.....do.....	132	73	59	14	9	7	2	4	1	8 to 2.....	7½ to 9.....	First Wed. Sept.....	Last Thurs. June.....	Shoe-making.
10...	Illinois.....do.....	Jacksonville, Ill.....	1846	Philip G. Gillett, LL. D.....do.....	269	133	136	25	16	9	7	3	1	8 to 12½.....	7 to 9.....	First Wed. Oct.....	First Wed. June.....	Cabinet-making and wood-turning, farming, painting and glazing, printing, shoe-making.
11...	Georgia.....do.....	Cave Spring, Ga.....	1846	W. O. Connor.....do.....	51	24	30	7	4	3	1	1	1	8 to 1.....	6½ or 7 to 8.....	First Wed. Sept.....	Last Wed. June.....	Shoe-making.
12...	South Carolina.....do.....	Cedar Spring, S. C.....	1849	J. M. Hughton.....do.....	15	7	8	1	3	1	2	1		8 to 1.....	8 to 9.....	January 1.....	Last of Oct.....	Carpentering and shoe-making.
13...	Missouri Asylum.....	Fulton, Mo.....	1851	Wm. D. Kerr, M. A., Superintendent.....	163	76	87	16	8	4	4	3		Five hours.....	One hour and a half.....	September 20.....	First Thurs. July.....	None.
14...	Louisiana Institution.....	Baton Rouge, La.....	1852	J. A. McWhorter, M. A.....do.....	47	26	21	3	4	3	1	1	2	8 to 1.....	7 to 8½.....	First Wed. Oct.....	Second Wed. July.....	Printing.
15...	Wisconsin.....do.....	Bellevue, Wis.....	1852	George L. Weed, jr., M. A., Principal.....	119	86	33	6	9	7	2	2		9 to 12 and 1½ to 3½.....	7 to 8½.....	First Wed. Sept.....	Last Wed. June.....	Cabinet-making and shoe-making.
16...	Michigan.....do.....	Flint, Mich.....	1851	Robert L. Bangs, M. A.....do.....	150	80	70	25	11	9	2	6	2	9 to 12 and 1½ to 3½.....	7 to 8½.....	Second Wed. Sept.....	Last Wed. June.....	Cabinet-making and shoe-making.
17...	Iowa.....do.....	Council Bluffs, Ia.....	1855	Rev. Benjamin Talbot, M. A., Sup't.....	119	72	47	16	7	5	2	3		9 to 12 and 2 to 4.....	7 to 8 or 8 to 9.....	Third Wed. Sept.....	First Wed. June.....	None.
18...	Mississippi.....do.....	Jackson, Miss.....	1856	John L. Carter, M. D., Sup't.....	31	22	12	2	3	2	1	2		9 to 12 and 1½ to 3.....	Varying with season.....	Second Wed. Sept.....	Fourth Wed. June.....	None.
19...	Texas.....do.....	Austin, Texas.....	1857	J. Van Nostrand, M. A., Principal.....	101	87	17	21	11	10	1	3		8½ to 12½ and 1 to 3.....	7 to 8 and 9.....	September 28.....	June 28.....	Cabinet-making and gardening.
20...	Columbia.....do.....	Washington, D. C.....	1857	E. M. Gallaudet, Ph. D., LL. D., President.....	50	18	32	1	3	3		2		8 to 1.....	7½ to 8½.....	First Mond. Oct.....	July 4.....	None.
21...	Alabama.....do.....	Tallahassee, Ala.....	1858	Joseph H. Johnson, M. D., Principal.....	65	39	26	6	4	4		2		9 to 12 and 1 to 3.....	7 to 8.....	Last Wed. Aug.....	Second Wed. June.....	Cabinet-making, gardening, and shoe-making.
22...	California.....do.....	Oakland, Cal.....	1860	Warring Wilkinson, M. A.....do.....	25	15	10		1		1	1		9 to 12 and 2 to 4.....	7½ to 8.....	September 1.....	June 28.....	Dress-making.
23...	St. Bridget's Inst'n (Cath.).....	St. Louis, Mo.....	1860	Sister Stanislas.....do.....	47	26	21	8	4	3	1	1		9 to 12 and 1 to 3.....	7 to 9.....	Second Wed. Sept.....	Second Wed. June.....	None.
24...	Kansas Institution.....	Olathe, Kansas.....	1862	L. H. Jenkins, M. A.....do.....	63	27	36		6	1	5	2		9 to 11½ and 1½ to 4.....	7½ to 8½.....	First Thurs. Sept.....	Last Thurs. June.....	Carpentering, cane-work, dress-making, gardening, knitting.
25...	St. Mary's Asylum (Cath.).....	Buffalo, N. Y.....	1862	Sister Mary Ann.....do.....	60	35	25	12	5	2	3	1		Five hours.....	7 to 8.....	Second Wed. Sept.....	Last Wed. June.....	Coopers and farming.
26...	Minnesota Institution.....	Faribault, Minn.....	1863	Jonathan L. Noyes, M. A., Sup't.....	73	28	45	11	5	1	4			9 to 12 and 1 to 3.....	7 to 8.....	First Wed. Sept.....	First Wed. after June 20.....	None.
27...	Inst'n for Improved Instr'n.....	New York, N. Y.....	1867	Miss Harriet B. Rogers.....do.....	16	26	20	37	5		5			9 to 12 and 1½ to 3½.....	6½ to 8½.....	Third Wed. Sept.....	Third Wed. July.....	None.
28...	Clarke Institution.....	Northampton, Mass.....	1867	Miss Harriet B. Rogers.....do.....	61	35	26	9	3	2	1	1		9 to 12 and 2 to 4.....	7½ to 8½.....	First Wed. Oct.....	Last Wed. June.....	None.
29...	Arkansas Institution.....	Little Rock, Ark.....	1867	Elmore P. Caruthers, M. A.....do.....	90	61	29	9	8	5	3	1	1	7½ to 9½, 9½ to 12½, 2 to 4½.....	7 to 8½.....	First Wed. Sept.....	Last Wed. June.....	Shoe-making.
30...	Maryland Institution.....	Frederick City, Md.....	1868	Chas. W. Fly, M. A.....do.....	25	12	13	3	2	2		1	1	9 to 12.....	7 to 8½.....	Second Wed. Sept.....	Third Wed. June.....	Printing.
31...	Nebraska Institute.....	Omaha, Neb.....	1869	Archy Woodside, Teacher.....	35	17	18	7	2	1	1	1		9½ to 2½.....	None.....	First Mond. Sept.....	Last Frid. June.....	None.
32...	Pittsburgh Day School.....	Pittsburgh, Pa.....	1869	Miss Sarah Fuller, Principal.....	45	19	26	8	4		4			9 to 2.....	None.....	First Mond. Sept.....	Early in July.....	None.
33...	Boston Day School.....	Boston, Mass.....	1869	Jonathan Whipple, jr., do.....	4	3	1	1	1	1				8½ to 12 and 1½ to 5.....	None.....	September 1.....	August 1.....	None.
34...	Whipple's Home School.....	Mystic, Conn.....	1870	Horace H. Hollister, M. A., do.....	49	30	19	8	4	2	2	1		9 to 12 and 1½ to 3½.....	7 to 8½.....	Second Wed. Sept.....	Third Thurs. June.....	None.
35...	West Virginia Institution.....	Romney, West Va.....	1870	D. Greenberger, Principal.....	14	9	5	3	2	1	1	1	1	9 to 12 and 2 to 4.....	7 to 8.....	First Wed. Sept.....	Second Wed. June.....	None.
36...	Chicago Day School.....	Chicago, Ill.....	1870	Wm. S. Smith.....do.....	11	4	7	1	1		1			9 to 2.....	None.....	First Mond. Sept.....	Last Frid. June.....	None.
37...	Oregon Institution.....	Salem, Oregon.....	1870	Miss M. A. Seeber, Teacher.....	1,068	2,277	1,791	421	260	161	99	80	30					
38...	Cleveland Day School.....	Cleveland, Ohio.....	1871															
39...	Institutions in the U. S.....																	
	National Deaf Mute College.†	Washington, D. C.....	1864	E. M. Gallaudet, Ph. D., LL. D., President.....	54	53	1	16	7	7			1	6 hours for rec't'ns and study.....	Three hours.....	September 28.....	June 28.....	None.
	Montreal Cath. Inst. (Male)...	Montreal, Can.....	1848	J. A. Belanger, Principal.....	75	75			7	7		2		8 to 10½ and 2 to 4.....	1½ to 2 and 4½ to 6½.....	September 1.....	July 1.....	Book-binding, cabinet-making, farming and garden- ing, printing, shoe-making.
	Montreal Cath. Inst. (Female)	Montreal, Can.....	1857	J. Scott Hutton, M. A., Principal.....	43	27	16	4	3	3		1		9 to 1 and 2 to 4.....	7 to 8.....	First Wed. Sept.....	Second Wed. July.....	Gardening.
	Halifax Institution.....	Halifax, N. S.....	1857	W. J. Palmer, Ph. D.....do.....	113	75	38	12	7	5	2	2		8½ to 2.....	7 to 9.....	First Wed. Sept.....	Last Wed. June.....	Cabinet-making and carpentering.
	Ontario.....do.....	Belleville, Ont., Can.....	1870	Thos. Wild.....do.....	18	15	3	2	2	1	1	1		Five hours.....	6½ to 7.....	First Wed. Sept.....	Last Wed. June.....	Carpentering and gardening.

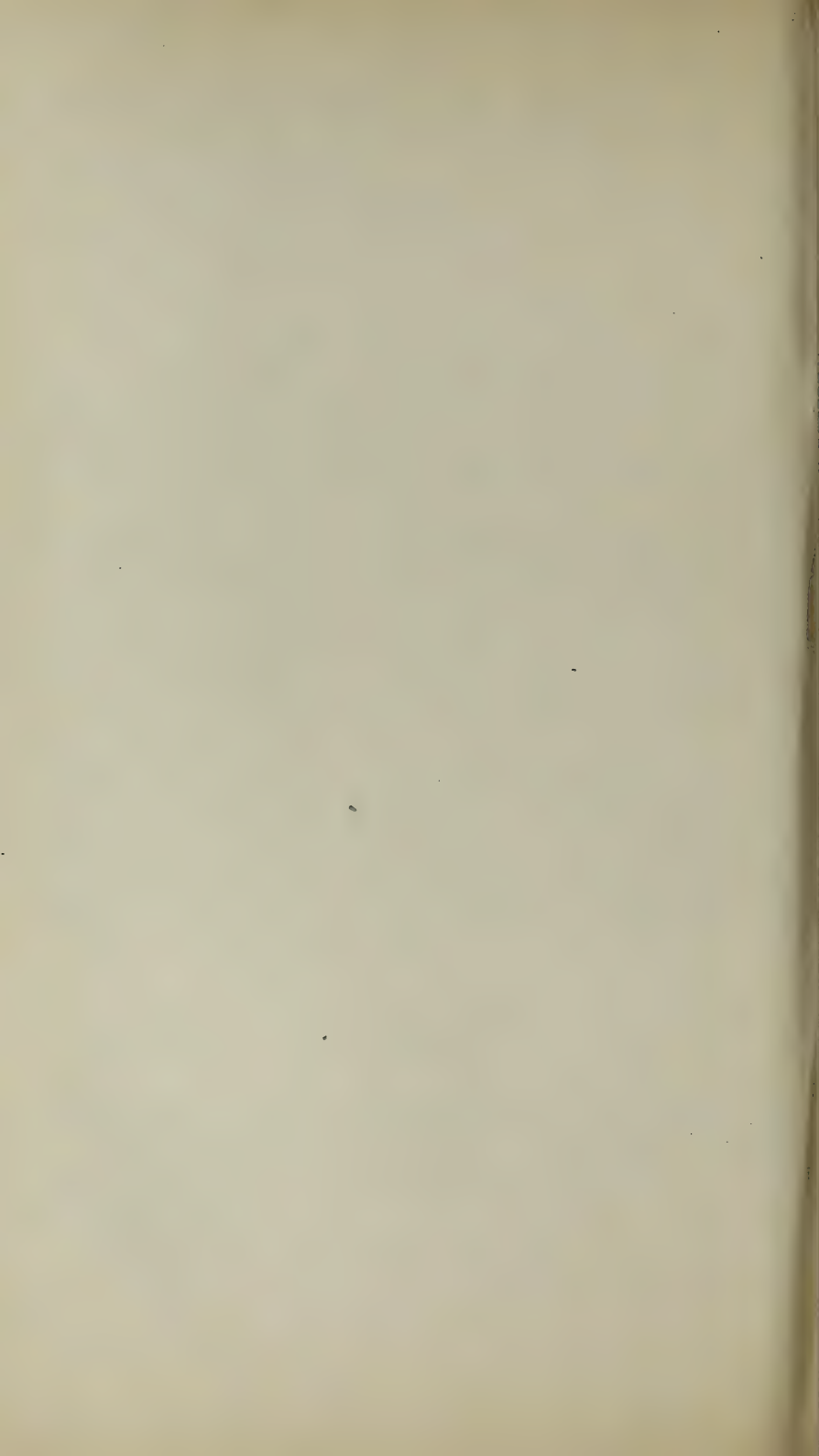
* Under this head are included the semi-deaf and all the deaf who have acquired some knowledge of language through the ear.

† Including the principal.

‡ Not including the semi-mute teachers.

§ Two sessions are for school, and one for shops, by a system of rotation.

• The National Deaf-Mute College is a distinct organization within the Columbia Institution. Its professors and students are included in the statement of the Columbia Institution given above.



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THE PSYCHICAL STATUS AND CRIMINAL RESPONSIBILITY OF THE TOTALLY UNEDUCATED DEAF AND DUMB.*

BY ISAAC LEWIS PEET, M. A., NEW YORK.

Nec ratione docere ulla suadereque surdis
Quid sit opus facto, facile est; neque enim paterentur
Nec ratione ulla sibi ferrent amplius auris
Vocis inauditos sonitus obtundere frustra.

LUCRETIVS, *De Rerum Natura*, Book V., 1052-5.

THE deaf-mute, as distinguished from one who is simply mute, is a person who, from the mere fact of want of hearing, does not possess the ability to express thought in articulate speech. Dwelling in a world of silence, sound awakens no responsive echo in his soul. Words which, thrilling nerves that excite the brain to action, call for an effort at least of imitation on the part of the child endowed with hearing, affect in him no sense that may be said to produce their counterpart. As the eye is wanting to the denizens of those subterranean localities into which light does not penetrate; as limbs are not furnished to beings whose locomotion is confined to a liquid *habitat*; and as the hand is denied to those orders of the animal creation to whose functions that marvellous instrument is not indispensable, so, where there has

* Read before the Medico-Legal Society of New York, November 9, 1871, and reprinted, by permission, from the *Journal of Psychological Medicine* for January, 1872.

been no hearing, there is no natural voluntary exercise of the corresponding faculty of speech. This does not imply, what is indeed in most cases contrary to the fact, that the physical organs of speech are defective, for if the deaf-mute could be invested with hearing, speech would soon follow, and many that have never heard have been so educated in the use of these organs as to be able to pronounce syllables and words in a manner recognizable by the ear. The mute who is not deaf, however, owes his infirmity to one of two causes: either there is malformation or weakness in some one of the parts on which vocal utterance depends, or there exists a want of vigor in one or more of the intellectual powers, even supposing such powers not to be entirely wanting.

Of those mute from the first-mentioned cause, *two* have been brought directly under my personal observation and instruction. One was a boy twelve years of age, who had been accustomed to hear, and hear perfectly, the conversation of those around him, and who could answer a great variety of questions which could be satisfied by an affirmative or negative movement of the head, and could obey directions given to him with the voice, but had never himself uttered a word. The malformation of his organs of speech was patent to the slightest inspection. He could not, when he entered the institution, read or write, but, after several years of patient instruction, was brought to a point where he could derive information from books, and express his thoughts and feelings with the pen. Without a natural defect of verbal memory, it was yet evident that this faculty had been greatly impaired by want of the ability to give expression to the words he knew; for it was a long time after he had learned to write single words from vocal dictation before he could retain a sentence of even moderate length so as to reproduce it. His other faculties were very much quickened by the use, on his own part, of signs, which he readily learned. Of course it was necessary to explain to him every form of expression he had not heard before. This was done partly by means of spoken words and partly by gestures, which he seemed to comprehend the more readily

from the fact that, in the society of deaf-mutes in which he was necessarily placed, he acquired a great facility in expressing himself in that way. In his case, the power seemed to be developed of comprehending more perfectly what was communicated by the method to which he himself naturally had recourse when communicating his ideas to others.

The other case was that of a young man eighteen years of age, also mute from birth. He entered the institution entirely illiterate, never having learned the alphabet in either its printed or written form. He had great self-respect, always attired himself neatly, and appeared to advantage in the silent intercourse he had with others. He had for some years worked in a woolen factory, and was able to support himself without assistance from his friends. In the single year he was under instruction he acquired an ability to read understandingly, as well as to give correctly in writing the incidents of every-day life, so that on returning to his manual labors he was in possession of a very satisfactory means of communication with others. Unlike the lad first mentioned, he must all the while have had a mental speech fully up to the necessities of the society in which he was accustomed to move. The language of signs was not used in his instruction, and he seemed to feel no inclination to avail himself of it. No impediment of speech was apparent to the eye—his inability being probably the result of some imperfection in the larynx.

The writer's own experience of nearly thirty years, however, enables him to add his testimony to that of other instructors of the deaf and dumb, to the effect that cases of hearing-mutes, with good intellectual capacities like those just mentioned, are so rare as to make the possession of hearing in connection with want of speech *prima-facie* evidence of mental imbecility. Instances of this last kind are unfortunately very numerous. Hardly a year passes that several such mutes are not presented for admission into institutions for the deaf and dumb by parents, whom hope had directed thither, to find that the calamity which had befallen their children was one far more deplorable than that of

mere inability to enunciate words, as it also is than of mere inability to hear them, notwithstanding all that this last-named condition involves. The active part which those connected with institutions for the deaf and dumb have taken in the initiation of idiot asylums, and the frequent occasion they have for correspondence with their managers, is thus accounted for. With beings such as these, patient effort to call into exercise a dormant will, and gradually to develop enfeebled faculties, has met with some degree of success, and, if I am correctly informed, some have been enabled to attain intelligent vocal utterance. But the greater proportion are incapable of appreciable benefit, so that our idiot asylums, so far as they prove themselves schools, must be regarded in the light of institutions wherein only those children can be benefited who are not so far demented as to be incapable of speech.

No such proposition can be entertained with regard to the deaf-mute. His defects are not primary, as appertaining to the mind; but secondary, as the resultants of the deprivation of one of the senses. The only class of ideas to the perception of which he may not arrive are those which are dependent, in themselves considered, upon the sense of hearing, though the vibrations which affect other nerves than the auditory may produce sensations so analogous that he may be considered, so to speak, as under the influence of the penumbra rather than that of the total eclipse, or perhaps more appropriately under the faint refraction called twilight instead of the full light of day. For instance, the *drum* will at once attract the attention of any deaf-mute, however profound his deafness, and the idea of musical *time* is appreciable by the majority of this class. Experiment has shown that the telegraph alphabet of Morse, beaten on the drum, on the principle of a single strong-beat for the short dash, and a quick double-beat for the long one, gives rise to vibrations affecting the deaf so distinctly, that a class of such persons, with their faces so turned that they could not catch sight of the instrument, have recognized words spelled by this means, and written them promptly and accu-

rately upon the black-board; and, in at least two instances, deaf-mute young ladies, without a particle of hearing, have been taught to render correctly, on the piano, strains of music represented to the eye by notes.

It will thus be seen that, like the Parian marble in which the mind of a Praxiteles sees the perfect statue, and from which, with cunning hand, he develops the realization of his ideal, or the rude mass of iron in which the master-artisan perceives, and from which he evokes the moving, almost breathing machine, the uneducated deaf-mute is a being of great possibilities, but still only possibilities.

His condition is a field on which Psychology gazes with interest as intense as that with which Newton viewed the starry firmament, and in which he seeks the solution of questions more difficult than those which the geologist asks the rocks.

Are there innate ideas? Is thought possible without words? Is the idea of God inseparable from the human mind? Is conscience an innate or an acquired faculty? Is moral responsibility a principle applicable to those who, possessing mental and moral powers, are yet so restrained in their exercise that they are but very imperfectly developed? Such are a few of the inquiries which spontaneously suggest themselves in connection with this subject, and which will necessarily be touched upon, if not fully discussed, as we attempt its development.

The term *uneducated*, as applied to a deaf-mute, is not to be understood as implying merely the absence of training in verbal language, but of all successful attempts on the part of those around him to make available to him the observation and experience of others, and to fix in his mind general principles of thought and action.

Considered in this light, what is he? Is he an intellectual being, and if so, in what sense? Though the current thought of the community in which he dwells finds no access to his mind, though the language which conveys to the hearing child of three or four years of age the germs of all subsequent knowledge is unheard and unheeded, he possesses a

certain degree of mental power which is entirely independent of such conditions.

This is not confined to that recognition of forms, and that association of recognized objects with qualities, and of actions with resulting sensations, in which many of the brute creation show such a degree of intellectual power as to make it difficult to fix the boundary between what we call instinct and reason; for, though many of the mental phenomena presented by deaf-mutes are merely a higher development of what is usually regarded in the light of animal instinct, as exemplified by the chicken that runs to covert when the wing of the hawk sweeps the sky, by the bee that flies in the face of the nearest stranger when the hive is disturbed, or by the dog that runs in the direction indicated by the finger of his master, still the higher possibilities of the heir of human reason soon manifest themselves.

Perhaps the first evident token of a reason higher than that of the highest of the mere animal creation is the ability to designate specifically the object of desire when that object is not in sight, and to complain specifically of wrong done when the author of that wrong is not present. Many of the inferior animals can manifest their desire for some object which they can designate when it is present, and some can exhibit indignation against those who have wronged themselves or their masters when they see the wrong-doer before them, but it is an exclusively human prerogative to be able to designate the *absent* intelligibly to others, and a yet higher prerogative to be able to designate the kind of wrong or the kind of benefit received at a time past. The dog who barks furiously at the man who struck him yesterday was never known to *indicate* purposely whether he was struck with a stick or a stone, whether in the head or the foot.

We may assume, then, that the starting-point of human intellect, as distinguished from animal instinct, is the use of *signs* to designate absent persons, objects, places, qualities, and actions. For the child who hears, these signs are very early supplied by the spoken words constantly ringing in his ears. For the deaf-mute, they must be visible signs.

When, therefore, a deaf-mute child has become able to designate whether he wants this thing or that, neither being in sight, or to tell what was taken from him and who took it, he has evidently ascended above the domain of mere animal instinct. The intelligent use of signs for ideas, furnished by gesture and expression, is as much a test of the possession of human reason as the intelligent use of the verbal signs which we call speech.

There are deaf-mutes whose sign-dialect is very rude and meagre, and there are deaf-mutes equally ignorant of verbal language who yet possess quite an extensive and well-developed system of signs. The difference is only in degree.

As, in the scanty dialect of a tribe of savages, we recognize the human power of speech, so, in a very moderate ability to use signs for recalling the absent and the past, we recognize those germs of human intellect which may develop into the multiform bloom of a cultivated language of gesture and expression.

That man is proved to be man only by the possession of a language is a received axiom. That this language or means of communication may be addressed to other senses than the ear, all intelligent men will admit. But the corollary that this language, the possession of which stamps its possessor as a rational being, may be simply a language of gesture, movement, and expression, without any hint of words spoken or written, is apprehended with difficulty by many men even of high intellectual cultivation. And yet this is equally demonstrable by facts and analogies.

It is very true that the processes of mental development, by speech and by a language of gestures, are not parallel—cannot, in fact, be made to run parallel. The great prerogative of the *one* is its power of generalizing and concentrating thought. The *other* owes to the pantomime which forms its basis, supplies its elements, and gives it much of its self-interpreting power, a certain pictorial character. Hence it is more graphic, and, for the class of material ideas, more precise. But, naturally dealing with the concrete and the actual, it grasps generalizations, abstractions, hypotheses, and per-

sonifications with difficulty, and attains to their full expression only after long and diligent cultivation, under the auspices of minds trained by the aid of verbal language. The great difference apparent in the mental and moral condition of uneducated deaf-mutes, who were probably originally of equal mental capacity, is due to the fact that the ignorance, stiffness, and prejudices of many of the connections and natural guardians of deaf-mute children have operated to induce them to repel, rather than encourage and aid, the instinctive efforts of the deaf-mute to make his wants and wishes known by signs. Hence it is that a deaf-mute child, placed in such discouraging circumstances, begins to talk by signs much later, and develops much less ability to communicate in that way than another deaf-mute child who is surrounded by intelligent and sympathizing friends, especially where there is already, in the family, some knowledge of the mode of communicating with the deaf by gestures and pantomime. Thus it is that, where there are two or more deaf-mutes in the same family or neighborhood, they usually possess a much more expanded dialect of signs than that which a solitary mute may be able to devise, and, as will be easily inferred, their social enjoyments are much greater, and their intelligence, being so much earlier and more constantly called into play, is much more fully developed.

In cases of extreme neglect, the deaf-mute may seem hardly superior to an idiot. But the capacity for development still remains, often to a somewhat late period of life, though, of course, faculties left so long in total inaction become more and more torpid with advancing years.

Cases of such extreme neglect are not now very common. The magnetic sympathy of mind with kindred mind penetrates the barriers interposed by closing the usual channels of sense, and it is seldom, indeed, that the deaf-mute is not blessed with at least one or two companions who, finding the ear-gate closed, will aid him to make more straight and easy the path to communion of souls through one or more unaccustomed portals.

A few years since, there died in Scotland a very old man bearing the name of James Mitchell, a name he himself had never learned to utter, or write, or spell. He had never heard the *voice*—never looked on the *face* of man or woman. Yet, though deaf and blind from birth, he gave evident proofs of the possession of human faculties, and by means of signs could make his wants known with considerable particularity to the one or two accustomed to communicate with him, and could receive and follow out directions addressed to the sense of touch to an extent which may seem incredible to those who have not investigated the ability of the human soul to supply senses that are wanting by the cultivation of those that remain. Had he been so fortunate as to meet a Howe or Hirzel in his plastic youth, he might have attained to a mental and moral cultivation perhaps not inferior to those which have rendered Laura Bridgman and James Edward Meystre the marvels of the world.

You will probably recollect that Blackstone, that oracle of the English common law, while admitting that ordinary deaf-mutes may manifest their wishes by signs, holds that one deaf, dumb, and blind from birth must necessarily be in the condition of an idiot. But those who have investigated such cases as that of James Mitchell are aware that the germs of a sign-language possessed by him are capable of being developed, as was done in the case of Julia Brace at Hartford, so as to furnish a medium for all necessary communications. Even with the deaf, dumb, and blind, where there are human faculties, the difficulties that prevent their development and cultivation may leave the individual low down in the scale of intelligence, but still far above the idiot or the mere animal.

It is painful to recall the judgments that in former times have been passed on the uneducated deaf-mute. There are few but have heard of that man of saintly and self-sacrificing benevolence, the Abbé de l'Epée, who devoted his life and fortune to the melioration of the lot of the deaf and dumb, and to whose zeal and labors it is in large measure due that education became possible to more than a favored few of

that afflicted class. This good man was accustomed to speak of the uneducated deaf and dumb as being on a level with the beasts that perish. His world-renowned disciple and successor, Abbé Sicard, declares that "a deaf person is a perfect cipher, a living automaton. He possesses not even that sure instinct by which the animal creation is guided. He is alone in nature, with no possible exercise of his intellectual faculties, which remain without action. As to morals, he does not even suspect their existence. The moral world has no being for him, and virtues and vices are without reality."

Other eminent teachers have put forth opinions equally derogatory. M. Guyot, of Groningen, one of the names that shine the brightest among the early benefactors of the deaf and dumb, assures us that "this unfortunate class are by nature cut off from the exercise of reason; they are, in every respect, like infants, and, if left to themselves, will be so always, only that they possess greater strength, and their passions, unrestrained by rule or law, are more violent, assimilating them rather to beasts than men."

An eminent German teacher, Herr Eschke, of Berlin, says: "The deaf and dumb live only for themselves. They acknowledge no social bond; they have no notion of virtue. Whatever they may do, we can impute their conduct to them neither for good nor for evil."

Another German teacher, Herr Caesar, of the school at Leipsic, founded by the celebrated Heinicke, the father of the German method of instruction, remarks that "the deaf and dumb, indeed, possess the human form, but this is almost all which they have in common with other men. The perpetual sport of impressions made upon them by external things, and of the passions which spring up in their own souls, they comprehend neither law nor duty, neither justice nor injustice, neither good nor evil: virtue and vice are to them as if they were not."

Dr. Barnard, to whom I am indebted for these citations, very justly and pertinently remarks that many of these instructors brought to their task the prejudices once universal,

and not yet extinct, which classed deaf-mutes among idiots. They seem, moreover, to have been unconsciously influenced by a desire to exaggerate the sad condition of the uneducated mute, so as to make a stronger appeal to public sympathy, and to set in a brighter light the success of their own labors by contrast with the dark condition of the being whose education they had undertaken.

There are not wanting testimonies on the other side of the question. I will here only cite that of M. Bébien, a younger associate of Sicard, in the institution at Paris, and the most able and accomplished teacher of deaf-mutes in his time. His opinion is thus expressed: "Deaf and dumb persons only differ from other men by the privation of a single sense. They judge, they reason, they reflect. And, if education exhibits them to us in the full exercise of intelligence, it is because the instructor has received them at the hand of Nature, endowed with all the intellectual faculties."

To reconcile these conflicting opinions of eminent authorities, we must recall the fact already stated, that there is an immense difference, both mental and moral, between a deaf-mute who has been neglected, and possibly hidden away from society as a family disgrace, (a treatment not unusual in the times before the zeal and success of De l'Épée made deaf-mutes objects of curiosity, attention, and wonder,) and a deaf-mute who has been blessed with kind companions, and has been encouraged and aided to enlarge and improve his pantomimic dialect. In a deaf-mute in the *former* condition, even the germs of the rational and moral faculties are scarcely manifested. In the latter, they have acquired a very considerable but somewhat peculiar development.

In treating of the psychological condition of the uneducated deaf-mute, we will take one of the average condition of the class—neither a victim of total neglect in childhood, nor the favored recipient of unusually kind, constant, and intelligent care. And here we must distinguish between what he is intellectually and what he is morally. By the effort to communicate his most obvious wants, and to bring himself into association with others, and by the reciprocal effect of

attention to these wants, and of response to his overtures, his mind is quickened into activity. The signs that spring up in his intercourse with his family may refer to all the more obvious interests of their mutual every-day life. He may be told to bring water from the spring, to call his father or brother, even to go to the store for certain articles. He may be told that the family will go to church after sleeping once, and that he will accompany them, or that he may ride to a neighbor's, or that a friend is coming to see him, and he will understand it all; but the moment that there is an attempt to communicate anything that has not been shown him, or that he has not seen, the effort fails. He obtains, if not a confused, at least a very erroneous idea. He is, therefore, left very much to his own conceptions. That he has an idea of cause and effect there is no doubt, from the recorded recollections of deaf-mutes concerning their days of ignorance. This idea is concrete in the sense that he seldom arrives at general conclusions, his judgment being exercised on particular cases that have fallen under his observation, and which he recognizes when they occur again. He knows that when it is cold he can obtain warmth by putting wood in the stove and lighting it; that if he leaves a pitcher of water out of doors on a cold night it will freeze, and the pitcher will break; that if he goes out in the rain he will be wet; that if he falls he will be hurt. By observing an effect familiar to him, he also knows what has produced it. He recalls past scenes which have been a part of his experience, and he anticipates what will happen on the morrow when a particular pleasure is promised him. He has, therefore, the power of memory, of analogy, and of imagination. He has, moreover, the association of ideas; for, in his efforts to communicate, it is observed that one thing will suggest another, and, in his silent communings with himself, he will have a succession of thoughts, one arising from another. In all this exercise of mind, except when he is actually conversing with others, he does not employ any vehicle of thought, not even signs. This is the invariable testimony of all deaf-mutes whom I have

questioned on this subject. *They think in images, and the signs they make grow out of and represent these images.*

Nor is this method of thought peculiar to deaf-mutes. The dreams which visit us in the hours of sleep are nothing more. The visions of inspired seers required careful subsequent effort to portray them in words. The poet reproduces, in the music of rhythm, the same ideal scenes that the painter presents to us on the canvas, and the converse is true that the painter is often the poet's best interpreter. It is thoughts without words that have immortalized Handel and Mozart and Beethoven, and given to their stirring symphonies a power that eloquence often strives for in vain. The blast of the bugle is a more inspiring call than the captain's "Forward!" and the light streaming on the banner a more cheering encouragement than any shouted words of hope. The journalist gives us descriptions of scenes and incidents which he has viewed, and succeeds in conveying to us correct conceptions, only by attaining that precision in the use of words which will enable the reader to form a distinct picture in his mind. The historian must carry his imagination back to the past, and, so to speak, lose himself in it, to convey to our minds any just conception of what *was*. It is this principle which gives such popularity to illustrated periodicals, and which makes the actor an educator to a certain class of minds. The etymological signification of the word *idea*—what is beheld—is of itself an indication that at least a large class of our thoughts are but pictures in the mind.

The expression, then, that we think in words, means nothing more than that long practice has enabled us to associate some form of words directly with our thoughts; for the thought is always antecedent to the expression.

In generalization, it is true, words greatly assist in keeping before us a certain pivotal idea, but even this idea is but a synthesis of many concretes instantaneously made in the subtle alchemy of the mind. No true thinker gives words the prominence in his mental laboratory, either as writer or student. He painfully endeavors to represent, by approximating symbols, thoughts to which he feels he can never

give the exact expression, and he carefully analyzes, with patient toil, the words which others have presented as *their* embodiment of truth.

Educated deaf-mutes have furnished to us, by their recollections of the past, much that throws light upon the amount of knowledge they had acquired previous to the time when they were brought under systematic instruction.

The details and results of a searching inquiry into this subject are given in a paper on the "Notions of the Deaf and Dumb, especially on Religious Subjects," contributed by my venerable father, Dr. H. P. Peet, to the *Bibliotheca Sacra* of July, 1855. To renew the investigation, for the sake of originality, even if I might hope to bring it to as complete and satisfactory an issue, would be a work of supererogation. I, therefore, avail myself of Dr. Peet's labors, so far as they illustrate my present theme.

"Few, if any, of these unfortunate children," says Dr. Peet, "seem ever to have reflected on the origin of the universe or the necessity of a first cause for the phenomena of Nature. As one of them expresses it, they 'thought it was natural' that the world should be as it is. Some even fancied that those whom they saw to be old had ever been so, and that they themselves would ever remain children," [or at least had not learned to anticipate a time of old age for themselves.] "Those who had learned, by observation and testimony, the general law of progress from infancy to old age, supposed, if they attempted to think on the subject at all, that there had been an endless series of generations. But probably there are very few uninstructed deaf-mute children of ten or twelve who have reached such a point of intellectual development as even this idea implies. It is much easier to give to a deaf-mute, by means of rude and imperfect signs, the idea that there is some powerful being in the sky, than to explain or even hint that this being made the world. Hence it is that very few deaf-mutes have ever acquired, either from their own reflections or from the imperfect signs of their friends, any idea of the creation of the world, or even of the plants and animals on its surface. Nor need this

surprise us, when we reflect that the most enlightened nations of antiquity had not mastered this great idea. Ovid, writing in the learned and polished era of Augustus, expressed the popular belief of his time in the theory that all things were produced by the due union of heat and moisture.*

“Many deaf-mutes, however, whether from their own meditations, or from misunderstanding the signs of their friends, have acquired childlike ideas respecting the causes of certain natural phenomena; such as rain, thunder, and the motions of the heavenly bodies. Quite a number supposed that there were men in the sky who, at certain times, made themselves busy in pouring down water and firing guns. The notions of deaf-mutes on such matters are often amusing enough; but, when not derived from a misconception of the signs of their friends, are evidently formed in a spirit of analogy. * * * An English deaf-mute boy, observing that he could raise quite a strong wind with his mother’s bellows, naturally concluded that the wind that sometimes blew off his hat in the street came from the mouth of a gigantic bellows. Neither does it seem that this belief was troubled by his inability to find the operator or the location of this bellows, for to one whose sphere of observation was so limited, and who could learn so little of the world beyond it from the testimony of others, the region beyond the circle of a few miles was as wholly unknown, and as open to the occupation of imaginary giants and engines and other figments of the imagination, as was ever the land of the Cimmerians to the Greeks, or the Fairy Land to the popular belief of the middle ages. Similar to this was the notion of a girl, who seems to have imagined that the plants which spring up annually in the fields and woods were like those in her mother’s garden, planted and watered by ‘some women,’ an infantile conception, in which, however, may be traced the first

* Quippe ubi temperiem sumsere humorque calorque
Concipiunt: et ab his orientur cuncta duobus.

Metamorphoses, I., 8.

germ of the old Greek notions respecting nymphs and dryads. * * *

“One lad, struck by the similarity between flour falling in a mill and snow falling from the clouds, concluded that snow was ground out of a mill in the sky. Others supposed that the men with whom their imaginations, or the misconceptions of the signs of their friends, had peopled the sky, brought up water from the rivers or ponds, and dashed it about through holes in the heavenly vault. The more general belief seems, however, to have been that there was a great store of rain and snow in the sky, a matter no more to be wondered at than the abundance of earth and water below. Some suppose thunder and lightning to be the discharge of guns or cannon in the sky; a notion the converse of that well-known one of the savages, who, when they first met in battle a European armed with a musket, believed they had encountered a god armed with thunder and lightning. Others say they believe lightning to be struck from the sky by iron bars. They had doubtless observed the sparks struck by iron from stone.”

Thus it is that human nature repeats its phenomena, and that deaf-mute children, left, by their inability to profit by the experience of their elders, in a prolonged infancy, exemplify, in their efforts to account for the phenomena of Nature, many of the fancies that prevailed in the infancy of society. The last idea cited bears a curious resemblance to the Homeric conception of Jupiter hurling the thunder-bolts forged by Vulcan.

In answer to the question whether they had any idea how the sun, moon, and stars were upheld in the sky, the uniform reply was that they had never thought about it. “It seems as natural to children that those bodies should keep their places above us as that the clouds or the sky itself should. * * * The stars in the view of many were candles or lamps lighted every evening for their own convenience by the inhabitants of the sky, a notion very natural to those who had had opportunities of watching the regular lighting at night of the street-lamps of a city. The moon was, to most of

those whose answers are before us, an object of greater interest than any of the other heavenly bodies. One imaginative girl fancied that she recognized in the moon the pale but kind face of a deceased friend; others thought that she continually followed them and watched their actions." A few regarded the moon with fear, while others thought she loved them.

The answers to the question, "Had you any idea of the existence of the soul as something distinct from the body, and which might be separated from it?" were uniformly in the negative.

"It is remarkable," says Dr. Peet, "that only one, out of more than forty whose statements are before us, seems to have imbibed any of the popular superstitions respecting ghosts. If the misfortune of the deaf and dumb prevents them from learning much truth, it also protects them in most cases from receiving those early impressions of superstitious terror and folly which it is often so difficult to get rid of in later life."

To the question "What were your thoughts and feelings on the subject of death? Did you know that you must yourself die?" Dr. Peet cites many interesting answers, which my limits compel me to omit. Their uniform tenor was to show that to the uneducated deaf-mute death is truly the king of terrors. Those who had not been taught the contrary by the signs of their friends cherished the belief that they could evade its power and live on forever. "We have heard of a lad," he says, "who, having observed that people who died had taken medicine, resolved to abstain from medicine as well as other hurtful things; an example of prudence worthy of general imitation." Another had entertained the horrible suspicion that the doctor's business was to poison off the sick; reminding us that tribes of savages have sometimes risen in fury and murdered missionaries, because the sick to whom they had given medicine had died.

"So far as we can learn from their statements," says Dr. Peet, "none of the deaf and dumb have originated the idea

of the existence of the soul after death, in a state separate from the body, and the attempts (unskilfully) made for this end, by many anxious parents, have at most given the child-like idea that the dead are taken bodily from their graves, or thrown bodily into a fire. The early impressions of certain German deaf-mutes, recorded by one of their number, (O. F. Kruse, of Schleswig,) were, that the bodies of the good remain uncorrupted in the grave, where they only slumber to be hereafter awakened, while those of the wicked rot and become the prey of worms. It is easy to understand that children who have never seen a corpse, except in the brief interval between death and burial, may suppose that the dead only sleep in the grave. One of the pupils in the New York Institution had been haunted by the terrible idea that, should she die and be buried, she might awake in the grave, and would be unable to call for help."

The general testimony of the deaf and dumb is, that before instruction they never had any idea whatever of the object of public or private worship, some probably taking the weekly assemblage at church as being as much a matter of course as any other periodical event; while others, if they tried to think about it, only added it to the long list of human actions which, in their darkened state, were incomprehensible to them. One or two seem to have made a shrewd guess at the secret motives of some outward professors, when they considered public worship as a recreation, and family prayer as a play; and the idea of another, that people met to do honor to the clergyman, might in some cases be pretty near the fact.

"To the same purport," says Dr. Peet, in summing up, "on all the points we have considered, is the testimony of many other deaf-mutes both in Europe and America. Nor have we ever learned of any well-authenticated case of a deaf-mute who gained any correct ideas on religious subjects by his own unaided powers of observation and reflection. We feel authorized, by the evidence before us, to deny that any deaf-mute has given evidence of having any innate or self-originating ideas of a supreme being, to whom love and

obedience are due, of a Creator, or of a superintending Providence, of spiritual existence, or of a future state of rewards and punishments." And this is the testimony of all who know the deaf and dumb thoroughly.

Yet the readiness with which deaf-mutes, at an early stage of their instruction, apprehend these great truths, the unquestioning faith with which they receive them, and the eagerness with which they cling to the hope of immortality, and especially to the promise that in heaven the deaf shall hear and the dumb join in the everlasting song of praise, conclusively show that the Creator has implanted in these children of silence a capacity for religious sentiment as fully as in their brothers and sisters who hear. And though St. Paul says, "Faith comes by hearing," he only meant to those who *can* hear. Had he ever known an educated deaf-mute, a spectacle which the world never saw till centuries after the great apostle had finished his course, he would have admitted that faith might come in the fullest measure through signs alone.

In a moral point of view the uneducated deaf-mute presents features of a still more interesting character. The idea of consequences he certainly imbibes whenever the government exercised over him is unvarying, whether for good or for evil. From certain acts he is deterred by his relation to certain persons, and to other acts he is in the same way stimulated. Under judicious control he comes to associate in his mind a line of conduct with what produces pain, and another line of conduct with what produces pleasure. Out of this grows a sort of conscience, which leads him to be sorrowful when he does certain things, and to be glad when he does the contrary. This conscience is entirely dependent upon the parent or other person to whom he is subjected. Given a good master, and he will be very likely to have a kind of moral sense that will be a safe guide in the life he leads, and will bring about habits which will be useful to him hereafter. Given a corrupt master, and the principle, that in the former case would have resulted in leading him to be *good*, will as certainly have the effect of making him *bad*. If the authority exercised be ty-

rannical, certain natures will rebel, and the most evil results will follow. If it be capricious, this moral sense will never exist. If no authority whatever be exercised at home, and he is left to his own devices, he will have as many consciences as there are persons he fears or desires to please. I have, in my mind, a boy now in the institution, whose moral education has been a work of peculiar difficulty. Though not deficient in intellect, easily pleased, and easily chagrined, no appeals to any of the higher motives seem to have the least effect upon him, not even an appeal to the affection borne him by a fond mother—alas! too fond. So far as emotion is concerned, he is not unlike Undine before she was endowed with a human soul.

From this it may be inferred that, by his own unaided, uninformed intellect, and uninstructed nature, the uneducated deaf-mute does not arrive at the idea of what is really right or wrong, and is ignorant of general law, either human or divine. He may be obedient, diligent, affectionate, habitually honest, but it will be owing to the influence of kind and firm control and good example, *not* to the higher moral and religious motives that are addressed to children who hear. He is too often self-willed, passionate, prone to secret vices; but this unfavorable phase of character is generally chargeable to early injudicious indulgence, the example of evil companions, and the lack of those *higher* motives that are supplied by religious education. He is *suspicious*, because he has been the butt of thoughtless companions. He lacks self-control, because he cannot, as well as others, appreciate the consequences of his actions. He *wishes*, as well as those who hear, to be *loved* and *respected*, and, like them, conceals his evil practices from those who he knows would disapprove of them. But he cannot distinguish between the approbation of the good and the mere complaisance of the unthinking; is apt to mistake the laughter of the latter for applause; and, when he is thwarted in desires, the folly and criminality of which he cannot appreciate, he is apt to think himself the victim of an unjust discrimination and oppression.

The view that has been taken of the intellectual and moral condition of the uneducated deaf-mute seems to settle the question of his criminal responsibility. One who knows and can know no more of law than what he can infer from the consequences which he has noticed are likely to follow from specific acts, who often mistakes his impulses for principles, and whose character is settled for him either by natural endowment or by the peculiar circumstances in which he may be placed, can hardly be considered as accountable in any ordinary sense of the term. Still, when he commits crime, he imperils the safety of the community, and violates the sanctity of the law, whose interference must in some way be invoked.

The two great classes of crime, viz., crimes against property and crimes against person, have given rise to proceedings of a very curious and interesting character when the criminal arraigned has been an uneducated deaf-mute.

Under the first head, the crime with him usually takes the form of theft, never of fraud; though sometimes it occurs that in the indulgence of anger or revenge he will injure property to an extent that, if the offence were committed by a hearing person, would subject him to the pains and penalties of the law.

In some cases occurring in France the plea was successfully advanced that a deaf-mute was not morally or legally responsible, and the criminals were dismissed, suffering only the detention before trial, which they probably regarded as the full punishment of their offence. They were perfectly aware that they did wrong, for they hid themselves to steal, and hid what they had stolen. This, in itself, it may be said, hardly exhibits more proof of intellect than is displayed every day by the sheep-stealing cur; but the deaf-mute, however uneducated, always displays a keen appreciation of the rights of property—knows pretty clearly what belongs to himself and what belongs to others; and, like children in general, is easily moved to bursts of passion by any interference with what he considers as belonging to himself. And that he steals with contrivance and in secret is a proof that he is

aware that he will be punished if detected. For this class of offences, therefore, it would seem as though moral, if not legal, responsibility could be attributed to him, though his unfortunate condition should certainly move his judges to leniency in pronouncing sentence upon him. And this is the view that has prevailed in more recent cases.

There is, however, a different class of cases in which the law comes into collision with the private rights of property. For instance, in a recorded case, near Rodez, in France, officers were sent to a farm to seize property for debt. In so doing, they treated with roughness the peasant, whom they caught in the attempt to drive off his cow. The deaf-mute son of the latter, a vigorous youth of twenty, seeing, as he thought, the rights of property violated, fell upon the aggressors and soon put all three to flight. Summoned with his father before the tribunals for this grave offence against the law, he recognized in court his late antagonists, pointed them out as robbers, and was with difficulty restrained from renewing the chastisement he had inflicted on them. He carried with him the full sympathy of the public and of the jury, and was acquitted on the ground that, being entirely ignorant of the legal rights in the case, he had only obeyed one of the first laws of Nature in defending his father and his property.

The class of crimes against the person presents greater difficulty, mainly from the extreme punishment which the law inflicts upon the highest of these crimes. If human law had never assumed the high and solemn prerogative of taking human life, the question of moral responsibility would not have been invested with such interest and importance in a legal point of view. A punishment that is irreparable, and, if erroneous, is in itself a great and irreparable wrong, startles the conscience, and leads it to demand indubitable authority for a punishment that is in no wise reformatory, and to welcome exceptions to the rule of life for life. This authority, and this rule of exceptions, are supposed to be found in the doctrine of moral responsibility and irresponsibility. It is assumed that the man who takes human life with pre-

meditation thereby forfeits his own, and knows beforehand that he does so; whereas he who strikes a blow in the sudden heat of passion, not intending to take life, is not responsible to the full extent of life for life if the blow proves fatal.

Another class of exceptions is that of idiots and maniacs, to whom guiding reason being denied by the act of God, they are held not to be responsible for their criminal acts, though the safety of society may demand that they be held in duress. The same principle has been naturally applied to the deaf and dumb, who, by the Roman code, being classed with idiots and the demented, in all the points of civil disability, denied the control of their own property in life, and precluded from altering its descent by will, were, by necessary consequence, classed with them also in the matter of criminal responsibility for criminal acts; being also, like them, subject to legal restraint when dangerous.

The cases in which uneducated deaf-mutes have been arraigned for murder are painfully numerous, considered in proportion to the number of this class of persons. The able and exhaustive treatise of Dr. H. P. Peet, on "The Legal Rights and Responsibilities of the Deaf and Dumb," gives the particulars of nearly a dozen such cases taken from European reports and journals, to which have since been added some in this country.*

The cases of Jane Campbell in Scotland, and of Esther Dyson in England, uneducated deaf-mute women, each of whom was charged with the murder of her illegitimate child, can be found in "Beck's Medical Jurisprudence." In the former case, after much argument and many doubts, the majority of the court decided that the prisoner was capable of

* This valuable monogram was printed in the *Proceedings of the Fourth Convention of Instructors of the Deaf and Dumb*, which is now very scarce. A reprint for private circulation is also quite exhausted. An imperfect copy appeared in one of the numbers of the *American Journal of Insanity* for the year 1856. It is especially valuable to the legal profession, for the full details it gives of the conflicting opinions of many lawyers and judges both in Europe and America; among other points, on the ability of an uneducated deaf-mute to make a contract or to give evidence in a court of justice, and on the mode of ascertaining his wishes and taking his testimony.

being put upon trial; but her counsel interposed the objection that she could not be tried till it was explained to her that she was at liberty to plead guilty or not; and, as no means could be found of explaining this to her, on this mere point of technicality the trial was stayed. In the latter case, the prisoner was judged incapable of being tried and conducting her defence, and was remanded to close custody, as in the case of a lunatic, till the king's pleasure should be known.

In neither of these cases was the decision based upon the ground of want of moral responsibility, the difficulty lying in the inability of the prisoner to comply with the established forms of legal proceedings; but we have an interesting report of a German case reproduced in the *American Annals of the Deaf and Dumb* for January, 1871, in which the accused, Johann Schmidt, an uneducated deaf and dumb shoemaker, was held morally and legally unaccountable for having killed his employer with a shoemaker's knife. It was shown that the master was a man of violent and brutal character, and that the deaf-mute felt, or professed to feel, in fear for his own life. But his defence turned mainly on the question of responsibility. His counsel urged that, "in the case of a person fifteen years of age,* who is endowed with all his faculties, the law doubts whether he is accountable; but the accused, in respect to intellectual development and to responsibility, is not to be compared with a hearing person fifteen years of age. The laws are not known to the accused, and no one can be tried by laws which he does not know." This reasoning had the effect to secure the full acquittal of the prisoner, who, however, seems to have been quite intelligent for one of his class, and was even able to allege distinctly, by signs, in his own defence, that, alarmed by the threatening gestures of his master, "dark night came upon his mind."

Other cases have been recorded in which deaf-mutes have, sometimes openly, sometimes lying in wait, murdered those who have offended them. Their advocates generally put in

* So in Germany. Under English common law, we think, fourteen.

the plea of absence of responsibility, but in most cases, at least those under French law, the plea has been overruled, and the prisoner put upon his trial. His misfortune, however, almost invariably moves the jury and the court, if he is found guilty, to a recommendation of mercy. In France, where a verdict of "guilty, with extenuating circumstances," has the effect to save the life of the criminal, this verdict was rendered in all the cases of deaf-mute murderers which we have seen, though one or two were marked with circumstances of unusual atrocity. The fearful ignorance and neglected state of some uneducated deaf-mutes are justly considered extenuating circumstances when there are no others.

I will close this branch of the subject by a sketch of a recent case which has especially attracted my attention, from the fact that I was summoned to appear in it as an expert:

In Ulster county, in this State, a deaf-mute boy of mixed parentage, African on his mother's side only, born in a poor-house, instead of being sent, as he might have been, to an institution, where public provision had been made for the education of himself as well as all his fellows in misfortune, was bound, during his minority, to a wealthy farmer. Certainly a great wrong was inflicted on Levi Bodine (the name given the boy by his mother, a name he himself never heard or knew) in depriving him of the means of education. And great wrong, sooner or later, generally entails severe retribution.

The boy's employer was a respectable and intelligent man; but did he ever seriously reflect that he had assumed a very high and solemn responsibility in taking charge of an immortal soul—giving color and shape by his management, or want of management, to the whole future of a lad whose strong and passionate nature might, under skilful and judicious care, have been trained to form an affectionate friend, a worthy and useful citizen, and a sincere worshiper of the Most High? Unable to reason with his deaf-mute apprentice, or to appeal to his better feelings, his employer seems to have contented himself with constant appeals to personal authority.

One day Mr. Hasbrouck insisted on making the deaf-mute do some work which he did not wish to do. According to the statement of the latter, made in signs to the writer, and one of his colleagues who accompanied him, the master used violence to that end, and the mute, like a half-tamed lion, roused to sudden fury, slew his supposed oppressor with an axe, which he was using at the time.

We are told that great indignation was aroused in the neighborhood by this murder of a respected citizen, on what seemed slight provocation. The deaf-mute could not tell his side of the story, and there was no one to tell it for him.

When the deaf-mute homicide was arraigned before a jury empanelled to test the condition of his mind, his counsel presented the plea of want of capacity to be tried, which they found in their books had been presented in similar cases in England.

At the opening of the trial, the prisoner's counsel claimed that he was unable to communicate with his client in any way; that it was impossible to convey to his mind the different degrees of homicide; that there was no way to inform him of his right to challenge jurors; that he could not be sworn in his own behalf, and that the law provided that no man should be tried who was not, at the time of the trial, able to understand the details of the case and prepare a suitable defence.

The district attorney, on the other hand, said that the prisoner's sanity was undisputed; there was no malformation of the brain; the neighbors and acquaintances of the accused were able to communicate with him by signs and make themselves understood. After hearing the arguments and the testimony of neighbors and the experts, Judge Hogeboom stopped the proceedings, expressing the opinion that it was of no use to send the case to a jury, and that, before the prisoner could be tried, he should be instructed. The prisoner was remanded to the jail, but the sheriff took no pains to carry out the recommendation of the judge, perhaps from the conviction that no teacher could be found to

instruct the poor deaf-mute, merely to prepare him for the gallows.

At a subsequent term of the court the case was again brought up for trial, this time before Judge Boardman. The jury disagreed, and Bodine was left in jail. But, being quite docile and harmless when kindly treated, and showing no disposition to escape, as he had no home to go to, he was soon allowed liberty to go out by day, returning to his prison quarters at night.

There is not the least probability that he will again be brought up for trial. Meantime, he is left wholly without instruction, even the simplest religious instruction, for the rules of the institution very properly preclude any one from being an inmate who has been guilty of serious crime against the person, and there is no one in the neighborhood of the jail qualified to undertake the instruction of a deaf-mute.

This recent case in our own vicinity, added to many more remote in time and place, points to conclusions which cannot be evaded. One is the duty which society owes to itself, not only of providing for the education of all deaf-mutes, but of making it imperative upon the parent or guardian, in each case, to secure to the child laboring under this misfortune the benefits within his reach. To him it implies vastly more than the same term used in connection with the hearing child, for the latter can never be said to be uneducated in the sense in which the deaf-mute is uneducated. To the hearing child every word spoken in his presence is a means of intellectual development. Every person, literate or illiterate, with whom he comes in contact, is for the time his conscious or unconscious teacher. In fact, school gives him so small a portion of the knowledge he possesses that it may be considered rather the regulator than the source of his attainments. In learning to read and write he simply acquires the ability to recognize and express, in alphabetical forms, a language he already knows; and in studying the other ordinary branches of education, he but learns a few principles which account for facts of which he

is often already cognizant. And, if he never went to school, he would, under the influences prevailing in a good home or a virtuous and intelligent community, learn all that was necessary to enable him to lead a life of rectitude here, and secure the hope of salvation hereafter. To the deaf-mute, however, education means *everything*; it means home, and hope, and happiness; it means self-control and virtue; it means the full and free exercise of all the rights, immunities, and privileges which belong to humanity. Understanding and acknowledging his obligations to society and to God, he becomes amenable to law; and, if placed in circumstances in which his character or his conduct comes under the review of the ministers of justice, he is able, either by direct verbal communication, or by signs in which he can give full expression to his thought through a skilful interpreter, to conduct his defence, and obtain all the consideration that is his due.

The State of New York has made full provision for the instruction of all deaf-mutes within its limits between the ages of six and twenty-five, and grants to those who commence at the earlier age sufficient time to make attainments which, when the intelligence of the individual is equal to it, fall little, if at all, short of those made by students in our higher seminaries of learning.

With a liberality, too, unequalled in this country, it has, in making this provision, given a choice of method and even of religion.

As the law now stands, all officers, charged with the care of those who, on account of poverty, are supported at the public expense, are obliged to place the deaf-mutes under their care at some one of the institutions for this class which the State has recognized. I would, however, that it should go further, and make it the duty of certain designated public officers to seek out all uneducated deaf-mutes, and require that they be educated.

Another of the conclusions to which we are led is, that the treatment of criminal cases, in which a deaf-mute is defendant, should be settled by statute.

In every case that now occurs, the prosecution argues, from the intelligence the deaf-mute manifests in various ways, such as his ability to communicate by signs to a certain extent, or to obey given directions, and also from the indications he gives of consciousness of guilt, that he has moral and legal responsibility, and therefore should be brought to trial and punishment. The defence argues, on the contrary, that his condition as an uneducated deaf-mute, if acknowledged, being *prima-facie* evidence of insanity, within the meaning of the law, he cannot be put upon trial even to ascertain his mental condition. If the court fails to sustain the defence in its assumption, there follows a long argument as to which side must bear the burden of proof, in which so much doubt is raised by conflicting opinions, that, as occurred in the case of Levi Bodine, in which two juries were empanelled under different judges, one judge decides that it rests with the prosecution, and the other that it rests with the defence.

As it seems to me, both the prosecution and the defence are in error: the former, as to the fact that an uneducated deaf-mute can be considered responsible in any such sense that the law may visit his act with punitive treatment; the other, that he is to be classed with either the idiot or insane. Mentally and morally he is much more in the condition of a child, though his physical powers may be those of a man. And yet it may be conceived that both sides can base, if not *sound*, at least *plausible*, arguments on the law as it stands. Whether this be so or not, the judge finds it difficult to expound the law in such a manner as to make it clear to the jury; and the jury, deliberating on a case which is novel in their experience, either yield to sympathies which are touched by the helpless condition of the prisoner, or terminate the case by a disagreement in their verdict.

Law is sustained by sanctions. But sanctions are worthless in the case of a human being who can never learn anything concerning them. An uneducated deaf-mute might come under the condemnation of the law and be punished, and yet his case could have no effect upon any other uned-

uneducated deaf-mute in deterring him from the commission of crime.

It would be a very simple and easy rule of law that the guilt or innocence of an uneducated deaf-mute should be established so as to amount to a strong probability, by testimony entirely independent of himself, and that, if he be guilty, he should be provided with a place of detention near some institution for the deaf and dumb, and receive instruction daily from such teachers as could be detailed therefrom; that, if innocent, he should be sent to the institution itself to participate in its benefits; and that, in either case, so soon as he was fitted by education to take his part in the great drama of life, he should be left free to do so, untrammelled by the fact that, at a time when he had not reached a point where he could be held morally and legally responsible, he had been brought face to face with violated law.

If this distinguished Society be induced, by the arguments that have been presented this evening, to urge upon the legislature the enactment of such a statute, a practical result will have been secured of more value than the mere interest which attaches to the discussion of mental phenomena, however striking or peculiar.

THE MUSIC ESSENCE.

BY FITZ HUGH LUDLOW.

[THIS story is reprinted from the *New York Commercial Advertiser* of December 31, 1861. Its author was at one time a frequent visitor at the New York Institution for the Deaf and Dumb, one of whose teachers had been his college class-mate and most intimate friend, and the story was suggested by the silvery laugh and remarkable grace and skill in dancing of a young lady pupil of that institution. The idea that definite analogies exist between sounds and colors is not a new one, but it has always been our impression that the conception of an apparatus for conveying to the minds of deaf-mutes a comprehension of the relations of sounds by means of colors was original with the writer of this story. This may be the case; but Diderot, in his "*Lettre sur les Sourds et Muets*," mentions a machine designed to represent sounds by colors, the invention of one Père Castel, which it was believed would be of great

service to the deaf and dumb, and which was taken to the Paris Institution for experiment with the pupils. Diderot does not describe this contrivance, but speaks of it as very ingenious ; it probably proved of little practical value. If, as is quite possible, Mr. Ludlow had seen this reference to Castel's invention, it does not detract from the ingenuity of his own imaginary apparatus herein described.—ED. ANNALS.]

I.

The first five years of my manhood were too painful to be dwelt upon. Years, it may be, of much wrong-doing—years certainly of great ignorance and unwisdom ; years also of suffering, like the inextricable entanglements of some slowly-thickening nightmare. Let them be summed up in this : that without any world-knowledge I went into the world ; without business capacity I attempted business ; with a morbid nature, which felt the breath of real life as a flayed surface feels a draught of winter wind, I rashly thrust myself into the tumult of a great city, and struggled for prizes with the strong. I had a partner. At this day the smile with which I speak that word is not one of bitterness, but simply of calm, experienced pity for the man that long ago I ceased to be. For what partnership can there be between strength and weakness—the bold, pushing mind of the market-place, the self-distrustful, shrinking, moody nature of the closet ? Because I did not know this, or, knowing, madly shut my eyes to it, I failed in my first scheme of life.

There were a few bright days when the venture looked prosperous, and cause delayed asserting itself in effect. I verily believed that I had conquered the course of nature—that even I might win the race of the world. Then came long days of growing doubt, of mutual coldness between my partner and me. Angry recrimination followed, and at last, with a few fierce words, we parted.

At this moment, though such impartial calm has succeeded to the former tempestuous bitterness, I cannot tell which was in the wrong. The whole affair was an inexplicable enigma to me. I was accused of fraud, but I could recollect no fraud. Of deceit ; but my brain was so distracted by things I had no talents for that I knew not true from false. Of

treachery ; how could any man enmeshed like me beguile another ?

After that there were lawsuits, arrests—yes, even one short imprisonment. During that last, which continued two days and nights, nothing but the absolute bareness of all means in my narrow cell prevented my ending that miserable life of mine.

At last—with my once sufficient property dwindled to a pauper's pension—the law let me go. The fraud which I could not remember, which I never knew when I committed it, which at this day I do not understand, was only not quite proved. My counsel told me that I had escaped by a hair's-breadth, and I was informed by others that he had worked night and day to save me. I have wondered since how many men like me may be shuddering all night long in the stone coffins of Auburn, of Sing-Sing? *Vae victis!* Prison is for the weak as well as the wicked.

Thus I passed the first five years of my manhood. Can you wonder that I cast them behind me—that I drop them in the depths of the sea? Let them be forgotten, unspoken things.

But because a man cannot be quite miserable while the destinies have some work left for him to do, a great kindness was shown to me in that hour when I found myself penniless, disgraced, utterly bewildered—and twenty-six years old.

An old friend of my father's—head of a school for deaf-mutes—invited me to become one of his assistants. I accepted the offer as if it had been a call into Heaven from the beckoning hands of the angels! I had been thinking of the silence of death ; here were *life* and silence possible. No more voices, no more cries of conflict or of pain ; but a great overshadowing rest and hush. This was better than being rich again, with one more chance to risk my ruin ; and for the first time in months I felt my eyes grow wet, and thanked God.

Seven o'clock of a Saturday evening in September saw me within the walls of the institution for the first time. A mute

servant-maid opened the door of the great front hall ; a mute porter carried my trunks up the broad staircase to my room ; and, while I stood waiting and wondering at the solemn silence which reigned through that immense home of seven hundred living souls—looking up at the high arched ceiling of spotless white, and the heavy doors of shining oak, with a feeling that all this largeness of proportion must be one of the traits of a dream in which spirits were thronging around me, silent to *me* only, because I was mortal—my friend came down the opposite corridor and spoke my name. Not a look, not a tone in his voice, recalled the past, as with a few kind words he welcomed me *home*.

“You will find your room ready for you,” said he. “You must be dusty and hungry. After you change your clothes come down to my parlor—No. 30—and take supper with me. At eight o’clock the pupils hold one of their Saturday evening *soirées* in the large assembly-room. It is the only time during the week that the girls’ and boys’ departments meet on a social footing. They have games—and many of them dance very prettily. If you are not too tired, this will be a fine opportunity for you to become acquainted with them and their peculiar characteristics. What do you say?”

“That it will interest me greatly. I’ll be with you in five minutes.”

Supper being finished, we repaired to the assembly-room. This was a house in itself—one hundred feet in length, sixty in breadth, and with a ceiling twenty-five feet high. Its floor had no carpet—and needed none—for its planks of yellow pine were daintily clean, and so beautifully variegated by the darkened, natural grain of the wood, that a refined eye felt no desire to replace them, even by mosaics. In this immense hall, beneath brilliant gas-lights, were gathered all but those very youngest pupils of the institution who had by this time been fast asleep for an hour in the baby-beds of their department. Every age above the child of seven or eight years was represented in this concourse. To my surprise, many of the pupils were full-grown young men and women. The larger portion of them were dressed in that

cheap, neat uniform of blue and white check blouses and gray pantaloons, for which the State contributes raw material, and the apprentice tailors of the institution do the making up—or dark-blue dresses and white aprons, from the same warehouse, and of like home construction. A hundred, it may be, of both sexes, were paying-pupils, from families more or less opulent—and these were permitted to dress as they chose, within the boundaries of elegant simplicity. Notwithstanding this discrepancy in attire, and the social interval it plainly indicated, a most democratic equality of feeling seemed to pervade the whole party. Check and blue were at ease in the presence of silk and broadcloth; the soft, white fingers that were born to gloves, unshrinkingly clasped the tough, brown hands of labor in all the common games.

Dr. Gaskell and I took seats on a sofa near the door, where we could watch the universal merriment without appearing to intrude the presence of a stranger.

“Do they never *laugh*?” I asked.

“Sometimes; but the sound is not pleasant to hearing ears. It is harsh, because they are without any test for its modulations. As they grow up they become aware of this, and put a restraint upon themselves. The younger children laugh like wild beasts—there, you hear that burst from those little fellows at the other end of the room? How jarring it seems! The older, more refined pupils, unless in severe pain, never venture an audible sound.”

At this instant a low, silvery gurgle of laughter, like a wood-robin’s evening note or the tone of a delicate harmonic glass, welled up from a throng at our side.

“Ah!” said Dr. Gaskell, “I should have made one exception. We have a most remarkable girl here who has never become entirely inaudible. It was she who laughed then. And she always laughs in that tone. How she contrives to make her voice so sweet is a never-ceasing enigma to me. If I were superstitious I should believe that her inner ear is in communication with the angels; that she hears *their* laugh and repeats it in her own. In twenty-five years’

acquaintance with every grade and variety of deaf-mutes I have never met a parallel instance."

"Are you sure that she does not hear in some slight degree?"

"Perfectly sure. Her external sense of sound is as near the absolute zero point as the organs can possibly be reduced. I asked myself the same question, trying to find a clue to her remarkable idiosyncrasy, till last fourth of July, when I saw my naughty little boy fire a pistol close beside her ear without in the least startling her."

"What is her name?"

"Margaret Somers."

"And how old is she?"

"Seventeen. She has been here since she was nine. Nearly half her life. I expect that we must part with her year after next, for her adopted father, Major Braithwaite, is determined that she shall be graduated as soon as possible. His only real relationship to her is that of second cousin, but I believe he loves her as well as he might have loved wife and children. He has never married—she seems all in all to him. He comes to see her whenever he can get furlough, and has only permitted her to stay with us so long because he is satisfied that she has great genius, and wishes it cultivated to the utmost. I agree with him—she is a wonderful girl. But see—they are getting up a dance!"

"Where is the music?"

"Ha, ha! You are betrayed into the question that everybody else from outside asks, when I invite him to a dance of the deaf-mutes! Think again; what good would music do them?"

"How absurd in me! Of course! But what pleasure can there be in dancing without it? And how can they keep time?"

"They *do* take great pleasure in it. As to the fact of their keeping time, you will see for yourself presently. Of its reason, you are as good a judge as I. It's all conjecture, but you can choose between the opinion I threw out just now, that Margaret Somers, who almost always leads them, hears

spirit music, and they follow her measure with their eyes, and another one of a phrenological nature, to the effect that every man has an organ of time independent of these fleshy flaps which we hear with, and measures ideal successions quite inaudible externally."

The set had taken the floor. Eight of the older pupils stood *en carré*, waiting for some signal, as you and I would pause for the music to begin. I did not need to be told which of the eight was Margaret Somers. Standing opposite us, in the head couple, her great blue eyes looking far away and half upward, her head inclined as if listening, her hands extended winningly but beseechingly, their gesture full of wonderful expression, like one who asks silence in a loving tone, her almost aerial figure swaying unconsciously with that dramatic grace which none but the deaf-mute can ever attain, which in the deaf-mute is the embodiment of the very inmost soul of language, she gave the signal and the dance began.

I could not have believed it! "Wonderful! wonderful!" I kept saying to Dr. Gaskell, as the silent dancers went gliding through the evolutions of their quadrille, and I, compelled by the absence of all other music, and the suggestions of their inimitable motion, hummed to myself a reminiscence of those strains to which I had so often kept gay time during the years which now were forever cast behind me.

Like some poor star-gazer, straining from his cold pinnacle to come at the very heart of those far torch-bearers on the Olympian course of the universe—enamored of their glory, awe-struck at the fleetness of their tireless glancing round the cycles, and certain that they run to the measure of some infinite music, could he but hear it—I bent further and further forward, devouring the glad faces of these silent dancers with my eyes, until the last foot paused, and I leaped to my feet, trembling strangely.

"How pale you are!" said Dr. Gaskell. "Do you feel ill?"

"No; but this dancing affects me very remarkably—*they must hear! she*, at least."

"I assure you they do not. Try it—call 'Margaret' in your loudest voice."

I hardly durst make the venture, so sure was I that it would startle her, but I did it. And the result was just what any unimpassioned spectator might have foreseen.

The doctor arose, and, catching Margaret Somers's eye, signalled to her. With the unembarrassed, springy footstep of a child she came to us, and the doctor told her in the sign-language that I was the new teacher. For a moment she measured me from head to foot—not staring at me, but gliding over me with a ripple of quiet sight—then smiled, and confidently took my extended hand.

"Do you hear at all?" asked Dr. Gaskell, manually, translating to me the conversation as it proceeded.

She touched her ears, and shook her head.

"Do you know what *music* is?"

"Oh, yes," she answered, her face gladdening suddenly, like a hillside when the clouds break.

"What is music?"

For a moment she paused, her face changing into that expression of deep concentration which is so well-known to those familiar with the deaf, and which is interpreted even by those who have longest known them, as "*waiting to be inspired*." Then she answered in signs so marvelously *vital* that I had no need of Dr. Gaskell's tongue-translation.

"*Music is the heart's feeling of God close by, when He touches us in quick throbs, and we try to measure them.*"

I lay thinking of that answer all night. It seemed to envelope like a great soul all that the masters have sung and written, from the day that Israel rejoiced passing through the sea, to the last echo of Bertramo's tremendous entreaty in *Robert le Diable*.

II.

Three months had passed away since my coming to the institution, and in that time I had made no mean progress in the language of the hands. *Hands* I say advisedly, for it is a common error among outsiders to suppose that the

ordinary intercourse of the deaf and dumb is carried on by means of the *fingers* merely; in other words, that they *spell* out their thoughts by the alphabet. Whereas, the truth is that this admirable alphabet of theirs is seldom used, because it is seldom needed, a system of pantomime, far superior in all qualities of grace and expressiveness to any seen upon the stage, superseding it for all ordinary purposes, and indeed far more accurately and rapidly conveying delicate shades of meaning than any possible alphabetic speech, save in the rare cases where some profound or novel metaphysical assertion has to be conveyed. Even in such instances I have seen the sign-language carried, by preference, to the very furthest limits of its capability, and many of the abstruser tenets of Whateley or of Hickok, which a speaking teacher has required three readings to master, have been pantomimically given to my perfect understanding by a deaf-mute class in logic or mental philosophy.

In the alphabet, also, I was literally "*factus ad unguem.*" But as yet my province lay among the middle classes of pupils only. *Why*, will be very evident. The dormant or just awakened minds of the younger children need all the practised patience, ingenuity, and technical knowledge of their intellectual processes which can be grouped together in the most experienced teacher, to conduct the delicate first steps of their thinking and communicating life. For this reason, a highly-developed deaf-mute, if he has the rare faculty of meek forbearance, is often their best master—as being the true "*hegemon*," the leader who never keeps farther ahead than the ranks can see him. Next in importance and dignity of requirements is the teacher who takes charge of the highest and graduating classes, composed of such pupils as have emerged from the workshop of the merely objective faculties, and must now be indoctrinated into truths demanding all the more inward implements of the mind in their subtlest exercise.

Accordingly, it was only in the evenings that I could prosecute my study of that wonderful new science, Margaret Somers. I improved every hour of those, I can assure you.

I set myself to the work of learning her as I would a system of philology, or the *Mécanique Céleste*. After tea, it was customary for Dr. Gaskell to invite several of the older pupils into his parlor, where for the time being we all threw off the trammelling relations of master and scholar, and talked together on pure friendly terms. Two of the deaf-mutes who frequented these *conversazioni* possessed the auditory faculty just so far as this—that, by opening their mouths over the strings of a piano or guitar, they could catch the very faintest shadows of its vibrations through the Eustachian tube, and enjoy the thin ghost of the music rather as an impulse than a sound. It was both touching and amusing to see these poor outcasts from the world of musical delights bending over the sounding-board of Mrs. Gaskell's piano, listening literally with open mouth, and holding their breaths as in the presence of some strange, beautiful angel, whose magic harp-strings of tenuous air they feared to shatter by a sigh of bliss. As Mrs. Gaskell played them some glad, resounding strain—the Wedding March from *Midsummer Night's Dream*, for instance, which was their favorite—I have many a time seen them press their handkerchiefs to their eyes, half to let the quivering chords meet them in a sacred solitude of sense, and half to catch the tears which were falling thick and fast like rain in darkness.

On such occasions Margaret Somers sat far apart from them, her usually bright face settled into an expression of intense melancholy. She had not even their poor relic of a sense. And invariably after the playing had ceased she would ask them with great interest what music they had been hearing to-night—if they enjoyed it as much as ever, and *what it was like*.

I fancy that most of us who have hearing ears would be puzzled by that question. Imagine it asked in Fifth avenue or Beacon street of a lady just come back from *Don Giovanni*, her opera cloak, as you may say, still fluttering with the rush of bravos, and one or two little tremulous notes of Zerlina lingering like frightened birds caught between its

folds. "What was Vedrai Carino *like* to-night?" I wonder how she would answer!

But the deaf-mutes who heard with their mouths seemed to find no such puzzle. They took the question quite as a matter of course, and made replies that, to us, were very curious. Once, one of them told Margaret that the Wedding March was like a bountiful peach-tree, whose fruit ripened so fast that you could see the down blush deeper and deeper after the fashion of a young girl's cheeks, and, growing heavier till the twigs bent almost to the ground, fell off, and then, becoming alive, danced away through the air to turn into a sunset! You may laugh at this, but it gave Margaret great pleasure. She had a mind which could find reality in the ghost of their ghost, and re-embody it for herself into some such weird Wedding March as I think Mendelssohn heard when he caught at least its negative daguerreotype on his score. By a singular coincidence I have also heard the two deaf-mutes describe Verdi's great Zingarella to her, simultaneously, as "the brightest possible Northern Lights."

It was on this last occasion, and by its suggestion, that an idea which for months had been lying chaotic in my mind began to find an axis for itself and take on crystalline form.

First, I thought how strange it was that these two friends of Margaret habitually preferred the higher kinds of music, music for which nine-tenths of hearing people, in this country at least, have just as much *penchant* as Chopin or Thalberg have for Old Dog Tray. By the way, this latter was the very air which Mrs. Gaskell tried on them one evening, when they replied, with an effort of great politeness, that it was very nice *noise*. We, the hearing people, all laughed very heartily at this, but *they* saw nothing strange in it, and supposed the distinction one which everybody made in the given case. It was evident, therefore, that their pleasure in music consisted in no mere passive impression of the auditory nerve, but that they possessed musical *feeling* of a very marked order. How could this be, on the common assumption that

all internal organs must be developed through the outer? Must there not be, on the other hand, a vast possibility of culture for this inner sense from inner sources, and through the other still acute passages of external impression, as our minds may be lifted by the music of a dream? And if so, was it not likely that Margaret Somers, superior to these two as she was in all spiritual perceptions, and analogical expressions of rhythm, had the internal organ of melodies and chords developed in the deep laboratory which we called silence to a still greater degree? Then, also, their translations of music into form and color gave me a hint—which I had been for months growing more and more willing to use for *her*—because—but never mind now—I am anticipating.

Why might not I be the one whom Divine Music had chosen to carry her message to that longing spirit?

This was the last bead in the rosary of the thoughts which I counted on that evening in the parlor. I had come to the cross—a long, hard work to be done—but I did not grudge it. Again, when we had separated for the night, I lay awake, hour after hour, considering at which end I should take hold of it. Then the finger of dreams put itself forth and touched the right place, without its aerial print vanishing.

III.

Old John Bull, “Tunefulle Maister Bull, of Gresham,” as his contemporaries used to call him, remarks in the course of some fragmentary personal recollections he has left us that the greatest enjoyment of his own musical compositions was not vouchsafed him at the time of their public performance, nor even during his own private renderings of the same; but that while he perused his completed score in the perfect quiet of the music-loft at midday, a divine delight ever seized him, and the spirit of his notes clothed themselves in an harmonious body, infinitely more splendid than any audible song. This fact made it possible for him to read music—not in the common sense—but as he would swim in the deep summer sea of a rare book, revelling in

all the sweet meanings of the author, yet never speaking a single word aloud.

Remembering this fact, I reflected that if Margaret Somers had ever possessed the faculty of hearing, and developed her musical perception by a scientific course of training, she might now read music after Maister Bull's fashion, and enjoy it to a similar degree.

The form which her problem consequently took was this: Is there no method by which the scientific relations of *pitch* (*time* I was sure she had become acquainted with already) may be communicated to the mind through other adits than the ear? Music in its pure scientific aspect is quite independent of sound, (uses sound only as its ordinary normal *expression*), and by all the more delicate intellects, the poets especially, is constantly translated according to a system of analogies into other than audible forms. Rossini is called *florid*, but his roulades have no effect of garlands to the *eye*, no fragrance to the *nose*. Verdi, they tell us, is *brilliant*, but who *sees* him shine? And the painters find no difficulty in understanding a picture's *tone*.

All music, it seemed to me, finally resolved itself into a science of *tensions*, and one nerve as well as another may convey the relations of tension, provided that we attain the means best calculated to awake their idea through the sense. The most delicate receptacles for external impression still left to Margaret Somers were sight, touch, and smell. After long thought, I most unwillingly gave up all idea of attempts to communicate through the last of these, not because I abjured the life-long conviction that the olfactory sense is next to sight in its capacity for receiving the most delicate impressions, but because as yet its very ethereality has prevented any true science of its phenomena. Through sight and touch, therefore, I must operate alone.

For a month, without communicating my plans to any one, not even the object of them, I spent every hour of leisure in elaborating a system of means.

At the expiration of that time, I told Margaret Somers that I would teach her music.

My earnestness, and the very fact of my making such a statement at all, opened her great blue eyes wider than I had ever seen them. "You forget," she signed, and put her fingers on her poor dead ears.

"Yes," I replied; "but you have eyes and fingers."

"I would give them away willingly for ears—even such ears as John's and Augusta's," (the deaf-mutes who heard with their mouths.)

"You shall keep those and have these," I answered. "Are you willing to try it? You will have to study hard if I am your teacher, but I am sure I *can* teach you."

"Will it give me great *pain*?"

"Are you afraid of pain?"

A quick scorn trembled over her lip, and she made a gesture as if the idea were some tangible bad thing which she would brush away.

"Afraid? No, indeed! But I have been praying for a year that God would give me hearing, even with torture; and I was wondering whether He had answered me to the utmost."

"No, dear soul; it will give you no pain. I have been praying God for you, too, without any request for the risk of torture; and I hope He will answer us both in His gentlest fashion. How could He torture you? Don't you remember your definition of music that you gave me the first time I ever saw you, 'God closely touching us in quick throbs?' Is it not good to have God close by; yes, if we shall be blessed in our good work, to have Him even closer?"

"It is *good*. But sometimes, even *now*, in His veiled comings, it is almost *unbearable*."

"Perhaps that may be because He is *veiled*; because of His dimness and mystery. To know Him nearer is to love Him more, you know. Are you willing to try it?"

She put her hand into mine like a white nestling dove. How delicate were her fingers! Their taper ends were as soft as an infant's. I could not have been surprised if I had heard that she used them to see with.

I led her into my recitation-room, now, at seven in the evening, left a wide desert of benches by that throng of children who had all day been devouring black-board geography by the continent, and made nothing of taking in a whole ocean at one draught. I lighted the gas, and with one sweep of the sheep-skin pad swept from the board those three hundred miles of the Rocky Mountains which had been left over from the last course of my little Leviathan's late repast. In its place I drew a staircase of seven steps, on as large a scale as the space would permit. The first and the second I made of equal heights, the third only half as high as these, then three more of the same altitude with the first two, and finally one of the half-height again. While Margaret was looking at this figure with an expression of puzzled interest, I took from my desk, where it had been lying all day, so that I could glance at it paternally between classes, a smooth deal board, three feet long by two broad. Across this I had stretched seven guitar-strings, all of the high *E* quality, and of equal length, attached at one end by a permanent ledge, as in the instrument to which they belonged, and at the other by two wooden screws of my own manufacture. At present these strings lay lax along the board.

"Now, Margaret," said I, "take your eyes from the black-board for a moment, and look at this thing which I have in my hand. It is the simplest instrument of music which we know. It is so simple, because it is most like the human soul, which has to understand it. *How* it is like, we must go back to your definition of music to perceive. When you have that strange sense of a presence near you, which you call 'God close by,' do you ever feel any *growth*, any *increase*, in the nearness?"

"Almost always."

I waved my hands up and down, then let them drop wearily, and made the sign for laxity.

"Does the Presence ever come to you when you feel *thus*?"

"It does, indeed! Oftenest *then*; when I least look for it, and most need it. *That* is the reason I think it is the *dear God*!"

I drew an extra guitar-string from my pocket, and gently stretched it with my hands.

“And as the Presence draws near, does your heart feel more like *this*?”

She understood me, but was by this time watching my hands so eagerly that she said *yes* only by an inclination of the head. I stretched the string still tighter.

“And as it draws still nearer is this feeling still greater?”

“Yes!”

I stretched it tighter yet—“And *still* greater?”

“Yes.”

I was adding force to my pull, when she caught my hands in hers, and with a wild impetuosity that I had never seen in her before, aided me at the extremity of her strength. The string snapped asunder, and, trembling like one seized with a divine afflatus, she exclaimed by a quick cry of her speaking hands,

“There! like *that* nearly!”

I renewed the lesson.

“The way in which men have agreed to represent the soul, and that growing strain it feels as the presence draws nearer and nearer, is by an instrument like this.” I touched the lower string of the seven, and continued: “This is loose, now, as the soul is, before the presence comes. I will tighten it a little to express the first sense of the approach.”

With a tuning-fork I got *C natural* of the vocal pitch, and began tightening the first string up to it.

“That is right,” said I; “Watch my hand closely. You see how many turns I give this screw? One—two—three—there! nearly three and a half. Let this degree of tension represent the feeling of the first throb of the presence. Now, to represent the sense of the second, I tighten the next string a little more. Nearly half a turn tighter yet—you see?”

And so I continued up the whole septenary system—avoiding, for the present, so as not to embarrass her mind with too much, any exposition of the only half-interval between the third and fourth, the seventh and eighth steps of pitch.

Besides, I felt enough faith in her ideal music to believe, chimerical as it might seem, that she would unerringly translate the half-tension of this minor interval into the internal impulse which quantitatively corresponded to it, at the proper time. And who can *explain* it, further than to reduce it to mathematical formulas themselves still more inexplicable?

The instrument being perfectly tuned in the natural gamut, I put it into her hands.

"Now shut your eyes, Margaret," said I, "and pull the first and second strings gently with your fore-finger. Try to banish everything outside of you but the strings, and see if you can perceive any difference in their tension."

"May I think of *God*? You know I believe *He* is the Presence."

"So do I. By all means, if it helps you."

"It does *help* me, very much."

"Very well, then."

She closed her eyes, and with her right hand struck the strings in succession. Her left was extended—oh, so gracefully!—as if she were listening with those delicate, beseeching fingers.

One, two—one, two—and she still sat motionless, giving me no report of any perception.

Presently she opened her eyes again, and looked at me for a moment with half-timid earnestness; then laid the instrument in her lap, while she signed to me—

"Must I banish *everything* but the strings?"

"And the Presence, you know, we agreed."

"Must I banish—you, too?"

As I looked at her, thinking with a strange conflict of emotions for a right reply, her eyes fell for an instant, and then resumed their pure, fearless gaze of inquiry.

"Do I help you too, Margaret?"

"Yes, you are *very* good to me."

"Then think of *me*, dear child."

She closed her eyes again. It was the first time any one had ever begged that leave since my mother died, long be-

fore the terrible five years, saying she would always think of me, even in heaven.

The silence of that wide, blank recitation-room had been broken by the frail, soft repetitions that came from Margaret's fingers scarcely three minutes, when her eyes opened again, a quick gleam of delight bathed her whole face, and her rapid hands exclaimed—

“I feel it! I feel it! I understand what you mean.”

I was like one intoxicated in my joy. I have heard people say that at such times they could “*dance*.” As for *me*, sitting perfectly still, and looking straight into that illumined face, was my only adequate expression of myself. I had reached the first possibility, which was the mother of all the rest—Margaret *could* hear with her fingers.

“Thank God!” said I, at length; “you will certainly learn music now, if we live. To-night we have been glad enough, and learned all that is good for either of us without having time to think of it. Let us put by this instrument till to-morrow. And now—why, it is half-past ten o'clock!—go, and sleep sweetly, and may the Presence be gently near you!”

“Do you wish to lock this up in your desk?”

“Why?”

“Did *you* make it for me?”

“Yes, Margaret.”

“Do you think I would be tempted to play on it? Are you afraid it would keep me awake if I should take it with me, and put it behind my pillow?”

“No, not if you promise not to play on it.”

“I *will* promise. And no one shall see it.”

So, clasping the board to her side with one hand, she put the other into my own, and went, holding it there like a child, to the foot of the broad staircase, where we must separate.

IV.

Within a fortnight from her first lesson, Margaret had mastered the whole gamut of *C natural*. I could blindfold her, place her finger upon any one of the strings, and get

back an unerring response as to its position in the scale. To my great encouragement her enthusiasm for this exercise continued unabated. She seemed to find all the pleasure of a hearing ear in the practice of her finger-education.

To relieve the monotony of this practice—for I could not see any possibility of its being otherwise than monotonous, remembering my own first lessons on the scale—I composed, now and then, some simple recreation for her by a numerical system of notation. She soon learned to recognize the little melodies I set for her, and was as delighted as a child when she discovered that the air she had been playing as “1, 2, 3,” was really the great national hymn “Yankee Doodle.”

But I felt the necessity of writing on these recreations, as over the benches on London bridge, “To *rest*, not to *lounge* on.”

By the diagram of the staircase which I drew, you remember, during Margaret’s first lesson, but did not then have time to use, I conveyed to her mind, little by little, the ideas of transposition. It is the most difficult thing in the world to explain even the mere external method by which she learned them—*my* part of the work, I mean—without a diagram like that on the black-board. Even then, some scientific musicians might so far discredit the possibility of teaching their science by such a method, that they would not care to understand me. But as nearly as words can explain it, this was the system I used. Recollect that I had taught Margaret the letters representing the notes of *C* scale, and had shown her the strings of our simple gamut instrument which corresponded to them. Also, that I had drawn for her a flight of steps, marking each step with a letter in the order of the scale, making *F* a low step, because it was only half the usual rate of ascent from *E*, and *C* a step equally low, because it bore the same relation of ascent from *B*. I now wiped out the original *F* which I had drawn and replaced it with another twice the former size. At the same time I sharpened the *F* string of our gamut instrument, and without altering any of the others, put it back into Margaret’s hands. This was my moment of suspense; yes, it may seem strange

to an uninterested person that I use this word, *agony*! For I reasoned thus: If all my past convictions have been delusive, then she will not notice this change except as a mere meaningless vagary, and will find just as much pleasure in thrumming the strings in their new relation of tension as before. But if she really has grasped the ideal principle of musical successions; if they have been recognized by her mind not only as a pleasure, but a *law*, then this disproportion which now exists will give her pain, and she will at least ask me what I have done.

A look of puzzle came over her face. First she glanced at the black-board, and then she felt of the strings. She lifted them one by one with the delicatest touch of her finger, as if she were weighing them, and she always paused longest at the sharpened *F*. At last she searched my face keenly, with an expression of query, and then shook her head.

“What is the matter, Margaret?” said I.

She touched the *F* of the instrument, and pointed to its corresponding step on the board, then signed this answer:

“I do not know why, but I have learned to *need rest* at this step. The soul seems always to tire for a moment, and lifts its feet only half as high as before. There are too many high steps together, now.”

My heart beat like a hammer! Would she, could she, find of herself what she must do?

“What will you do to help it, Margaret?” said I.

She thought, and looked, and fingered for several minutes more. Then she rose, took the chalk from my hand, and going to the board, altered all the other steps of the staircase to correspond with the raised *F*. Without my suggestion, she had transposed the scale!

I took the instrument into my hands and tuned it to the transposed key. I thought she might have done it, was sure she could, indeed, but I could not bear to mar the strange delight of my new triumph by any further suspense. Then I handed it back to her, she ran over the strings, and in an instant her whole face beamed with joy at the dis-

covery of the restored proportion. I knew such gladness in that hour as all imaginable riches could not buy from me.

Day after day I taught, and she studied patiently. In two months from the time of our first lesson in transposition she had learned all the keys and acquired the ideal philosophy of their meaning. At length I ventured to put a guitar into her hands. The artificial arrangement of its strings baffled her long, but before the summer vacation of the institution had arrived, she had mastered the relations which existed between our simple gamut instrument and this more complicated one.

As yet neither of us had imparted our secret studies to another soul beside ourselves. I knew Major Braithwaite was coming to see her graduated, and I wished to reserve the great surprise of her accomplishment for him.

Commencement-day had come. With it came all the friends of pupils who had friends. And among the first persons whom I saw in the morning as I came down the broad staircase to breakfast was Major Braithwaite. He was just entering the front door. Margaret happened to be in the entry at the time. The moment she saw him she ran into his arms, and he clasped her to him. Passionately? A heart-sickening doubt came over me. I had supposed he was a kind of adopted father to her. I had never heard of his being, thinking of being, anything else. Yet a father does not kiss in the way *he* kissed. There is not that strange light in a father's eyes when he sees his daughter.

Major Braithwaite was the perfection of soldierly beauty. His beard, which he wore full, was a luxuriant, curly black, like his hair, only, as the hair was not, slightly touched here and there with iron gray. His features were massive and Roman, without being heavy; his figure tall, erect, but not inflexible, and he seemed about thirty-six years old.

I was introduced to him at breakfast, and he thanked me for the interest I had taken in his ward. He meant the books I had explained to her—the conversation I had enjoyed with her in Dr. Gaskell's parlor, of which that kind man had told him. But the greatest of all interests—did

he know *that*, and would he have thanked me if he had known it ?

Before the exercises of the day commenced, Dr. Gaskell called me into his study.

"I have good news for you," said he. "You are so trusted by all of us that I know I am not betraying confidence in telling it to you. Margaret is going to be married ! Now, who do you think is the gentleman ?—guess !"

"I am sure I can't think," replied I, in a dream.

"*Major Braithwaite!* He has always loved her since she was a little child. He believed that there was nothing she could not be taught to do. He has all the admiration of her that you or I would feel for Elizabeth Barrett Browning. And so he sent her here to be developed. This morning he asked me if she was sufficiently the woman to know her own mind—if I thought she could love anybody consciously, and answer for herself intelligently. I told him yes—decidedly. You see he has all the gentlemanly and soldierly horror of taking the weak at a disadvantage. When I said yes, he acted like a boy ; he was perfectly overcome. He means to tell her that he loves her to-morrow. Of course she will accept him. Then she will be married during the vacation, and have a happy home as long as she lives. He is rich, and if she wishes it, he will resign his commission. So," concluded the doctor, rubbing his hands with pleasure, "her fortune is made for life. Dear girl ! I am so glad ! I think you will be asked to be the groomsman."

"That is capital !" said I, coolly—still in my dream ; and so we parted to get ready for the exercises.

In these Margaret acquitted herself well—admirably. She shone like a queen among all the deaf-mutes who read or recited. At every new eloquent answer to the questions of the examiner which she wrote on the black-board, I glanced furtively at the Major, and saw proud sparkles in his eye which set my own heart on fire.

When all was over, the graduates were invited into Dr. Gaskell's parlor. I was still in my dream, but I thought enough of the outer world and its results to bring in Marga-

ret's guitar unnoticed and set it in the corner by Mrs. Gaskell's piano. The hours of the evening went on, and still Major Braithwaite was chained to Margaret's side. He hung on her every gesture and lived in her looks. At ten o'clock all of the deaf-mute company, wearied with the day's labor, had departed, leaving Dr. and Mrs. Gaskell, Margaret, the Major, and myself alone together.

I signed to Margaret. She went to the corner and brought out her guitar. The rest looked at her with puzzled curiosity.

"Major Braithwaite," said I, calmly, when she had taken her seat again, with the instrument in her lap, "I have kept the best wine until now. I wish to crown this last day of Miss Somers at the institution with the highest attainment she has made. Listen, if you please, and hear what she will do for you."

Again I signed to Margaret, and her fingers ran nervously over the strings. I looked at her steadily, and tried to throw into that look all the cheerfulness I could imagine. Then she seemed to take heart, and began that simple, rich melody from the Bohemian Girl, "When other lips and other hearts their tales of love shall tell."

Then came the turn of the others to dream! Dr. and Mrs. Gaskell sat silently in a trance where astonishment had not yet yielded to delight. Major Braithwaite, sitting straight upright in his chair after the soldierly manner, was pale as death, listening with compressed lips and breath that was imperceptible, save now and then in strong-burdened inflations.

From the first air Margaret's fingers wandered on to the second I had taught her. This was the Rataplan, from the Child of the Regiment. I had given her that in the old times, that, looked at through my dream, seemed a hundred years ago, because I thought it would please Major Braithwaite.

When she had finished playing, Mrs. Gaskell turned to me.

"Does she hear after all?" said she.

Major Braithwaite answered for me.

"No, she does not. She never knew I had entered this morning till I touched her. Her back was turned when I came in, and, forgetting her affliction, called her name. *Who* taught her to play?"

"Major Braithwaite asks who taught you to play, Margaret," said I.

She replied by laying down her guitar, stealing up to my side like a child, and taking my hand. The look she gave me then was at once joy and agony enough for years! Major Braithwaite saw it and grew paler still.

"Does she know any meaning in what she plays?" said he, eagerly; "does she play like an automaton? or can it be possible that in any way she understands it as music?"

As he spoke he signed the same questions to her, and she answered them:

"I *feel* God near me in that music—God and *kindness*—God and *him*." She pointed to me as she signed.

"Wonderful! wonderful!" was all that Dr. Gaskell and his wife could say.

But Major Braithwaite rose and stood between Margaret and me.

"What made you think of teaching her this thing?" said he. "I do not ask you *how*, for I could not understand that just now if you should tell me; but *why*—what was your motive?"

It then broke forth from me for the first time, because, even in his presence, I could not hold it longer:

"Because I *loved* her!"

"And does *she* love you?"

"Ask her."

So he asked her, and she returned me such an ineffable look that now, remembering it, I seem to be among the angels.

Major Braithwaite folded his arm around her, and kissed her on the forehead—not as in the morning, when he had kissed her on the mouth.

"My dear, dear *daughter!*" said he, "I believe you have chosen well. Would you be willing to go everywhere over the world and be this young man's wife? Supposing he had to be a soldier, like—many men, for instance; had to fight the Indians; be separated from you through nights and days when you would be very anxious about him; suppose you had to endure hardships for him—loneliness, doubt, fear, everything bitter and dreadful—would you be his wife still—his true, loving wife?"

Margaret's only answer to his signs was to cling still closer to me, and hide her face against my shoulder.

"Very well," spoke the Major. "Have you the salary which will enable you to support a wife, young man?"

Dr. Gaskell answered for me that my salary would be raised to twelve hundred the next term.

"That is enough," said Major Braithwaite. "A woman who loves a man can live on much less than one who does not. Margaret is now graduated. She can be married at any time. I would like to have it take place somewhere where I can be present. Can you come out to Fort Allen and be married, sir?"

"We can go anywhere to have you in our happiness, dear father," said Margaret.

"Very well," said the Major, calmly; "let it be in August, then."

VI.

After Margaret and I were married, we continued to live at the institution for a year. Then my mother's brother—an eccentric, though not an unusually rich man—who believed that young people should help themselves, awoke to the consciousness that I was doing that thing tolerably well, and had a wife to carry honorably through the world besides. So one day he offered to take me into partnership with him in his flourishing New York jobbing house, and for Margaret's sake I accepted the offer.

When we got into New York I found my means ampler, and the first thought I had was to complete my wife's *musical* education.

Again there arose in my mind those old analogies between sight and hearing. I had taught her something about music by the relation between sound and touch. There were still greater harvests of delight to be reaped by that wonderful mind of hers in the domain of *color* as representative of music.

We had a house in West Twenty-sixth street. For the first time in my life I knew what it was to have all the *gas* I wanted, and to pay the company a correspondingly large bill for the same. For my wife's New Year's present during the second year of my marriage I prepared a surprise based upon the following principles:

In Natural Philosophy we are taught that the primal colors, as ascertained from the phenomenon of the rainbow, are: "Violet, indigo, blue, green, yellow, orange, red." But the question arises, is the rainbow a *gamut*, or a harmony? I decided that it was the latter. For its intention is the expression of *hope* to man. A mere scientific gamut would not have done *that*. The rainbow must be an expression in color of certain *gratifying* sentiments in the divine mind. Those sentiments, in heaven at least, must be reducible to speech. Therefore to music also. Let us try them on earth!

I came to the conclusion that the rainbow was not the true gamut of colors correspondent to the ascertained gamut of sounds. It must be divided and rearranged before the gamut can be made. And this was the rearrangement which, after long thinking, I arrived at: yellow, violet, blue, indigo, green, orange, red.

This, you see, at least in theory, was an order measurably consistent with the gamut of sounds. Between blue and indigo there is apparent but half the interval of color which intervenes between yellow and violet. Orange and red are separated from each other by but half the distance which divides indigo and green. Thus I constructed a gamut of colors which should to my mind represent that of sounds. I arranged in my study a long gas-pipe, connecting laterally with burners, whose several ground-glass shades were colored in order according to my theory. I then constructed

an apparatus with strings like the original one by which I had taught my wife, so that at the least pressure upon the strings the delicate cone of burning gas, which I had already lighted within these colored shades, should flare up into a broad tinted brilliancy. If, for instance, I moved the *F* string, it not only gave me the sense of its peculiar tension, but an indigo light on the wall before me also. Likewise, a touch on the *A* string gave me orange light; on the *D* string violet, and so on. Between each of these shades was one of combined tints representing the half intervals.

On New Year's day, for the first time in a month, I opened to my wife the door of my study.

"Come in, darling," signed I; "I have a new instrument for you. I want you to play on it for me. See if it gives you any greater pleasure than the guitar."

Margaret sat down in front of the strings and began playing the air, "True love can ne'er forget," while she watched the coming and going of the colored lights. A new delight seemed to seize her. She tried all the strings at once with capricious fingers, and shuddered as she saw a certain discrepancy in their relation. She pulled two neighboring strings at once, and the effect of their light combination on her was that of a musical discord. Then, finally, she returned to the true melody, and found such a new pleasure in the relation between tension and colors—in what we call music—as I never saw in the most rapt of hearing performers before.

After this first experiment she grew rapidly in her knowledge of inaudible music. She made many suggestions by which I immediately profited—as to the colors of the lamps. With a box of paints, she drew me the exact shades which, to her mind, represented a certain tension of string, and I had it immediately copied in glass to replace in the apparatus.

From melodies she gradually rose to harmonies. She learned to combine two tints and tensions so as to give her the idea of *chords*. And when she had accomplished this attainment, I knew that her musical attainment was at its

earthly apex. She might learn the most difficult pieces of Chopin—and find pleasure in them—but she never could attain further *primal ideas of music* till she reached that great resounding dome of Heaven, where the angels play and God is satisfied !

VII.

“ Dr. Athanasius Bloor cures all diseases of the eye and ear. His operations are painless, his success absolute, and he is recommended by the following gentlemen, whose selves or families have been benefited by his treatment :

“ Timothy Tompkins, Esq., Common Councilman of Peoria ; strabismus.

“ Rev. Hezekiah Green, Jenkinstown, Conn. : permanent deafness.

“ Hon. Peter Plumpie, Sec. For. Miss. Soc. : blindness and deafness, entire.”

I saw this advertisement in one of the New York papers eighteen months after I was married. I debated for a while whether Dr. Athanasius Bloor was not a quack. Finally I determined to take my wife to him. He could not hurt her at any rate, and he might make her hear, which would be the crowning delight of my life.

So I took my wife to Dr. Athanasius Bloor's.

I found that he was *not* a mere quack ; that he had really done, and was capable of doing, far more good than the newspapers gave him credit for. I put my wife under his treatment. He discovered that her loss of hearing was to be ascribed to no congenital and irremediable cause, but to a pressure on the auditory nerve which rendered it obtuse. This pressure, he thought, might be either a sluggish cerebral tumor, or a closing of the outer passages through the results of early disease.

Whatever it might be, he had remedied it in two months from our first interview with him. Margarët heard some sounds. She knew when they were firing salutes from Governor's Island, or ringing the bells for fire in our district, for instance, and in six weeks more she heard my voice ! Oh, blessed time ! It seemed as if Heaven had been brought down to earth again. The voice that spoke to her sweetest ! And she distinguished it from the hard noises of the world !

Well, for one short month I was a happy man. He who has been happy for a whole month, if he remembers it, may be happy forever. So, at least, must I fancy, to live—to *bear* life at all now.

My beautiful one began fading. Day by day I saw it without believing it. And when I asked her why she was so wan and pale—why she trembled so ~~as~~ to wake me through the long nights—she answered in her old beloved signs, which she clung to still—

“It *jars* me so! There is too much *noise* in the world. I do not hear enough *music*.”

At last I became sorry that she heard. I even prayed God that He would make her deaf again. She had expected too much of the world. There was more noise than music there.

But I had made her *hear*. I must accept *that*. I had thought it a blessing. If it was not a blessing, whose fault was it?

I was compelled to confess my wife's situation very critical. Her peril stared me in the face. If some means could not be found of protecting her sensitive soul from the shocks of the outer world's discordant sounds, she would certainly die, and that very speedily. I could think of no other comparison for her than a spirit walking through the din and the roughnesses of life, in perfect nakedness, but with all the bodily senses strangely preserved to it; feeling the cold with an intensity of pain which bodies never knew; hearing the outcries, the curses, the wailings of men and women with an infinitely sensitive ear; seeing all the cruelest wretchedness of humanity with a piercing eye that could not close, without shelter, without sleep. I began to understand that God had meant Margaret's deafness as a great mercy—that it was the necessary cover to the most delicate of human souls, in order that she might really hear no more of the world than could be taken in through sight, touch, taste, and smell.

I could not restore her deafness, but I environed her with all that was loveliest in earthly voices. I made this care of

her my only luxury. I sacrificed everything which men usually call desirable to the one aim of enshrining her in a sacredness of sweet sound. I bought the choicest music-boxes, and kept them playing by her bedside when she lay down to sleep. I took her to every performance given by the best artists in opera or concert-room. Oh! with what joy did I thank God when I found that there were some musicians whose music was not too harsh to give her pleasure! How I exulted when that grand dear Formes brought tears of happiness to her eyes in *Bertramo*; when D'Angri's wonderful honey of song distilled through her ears into her heart, and made her clasp my hand with a glad thrill in *Zerlina*!

But from all the great singers and instrument-players she ever came home to seek a better bliss in the music of that apparatus I had given her on New Year's day. That expressed to her mind a music such as she would never hear till she reached heaven. And while she tenderly touched the strings, weighing their tension as of old, and watched the gleaming colors dance hither and thither on the wall, the bitterness within me welled to the eyes, for I knew that she was getting ready to hear that music of eternal life in which there are no false tones.

We had been married two years, when, one night, I took her to hear Formes for the third time in *Roberto*. That night the greatest of living singers and actors eclipsed himself. Having the greatest opera that was ever written to be great in, he was great enough for it. He was the *Bertramo* whom Meyerbeer meant. Never again in this world do I expect to see Robert the Devil. The thought of hearing any other man than Formes sing the tremendous music of that last act is a pain to me. My memory of the opera now is such that to find it misrendered in a single point would be like breaking down the everlasting distinction between right and wrong. *Roberto* is an opera whose plot has no parallel for sublimity in the grandest involvements of Greek tragic writing. *Æschylus* never had such a plot. And there is not one particular in which the music of Meyerbeer could

be ameliorated for the plot's expression. Nor is there a man living who understands that plot—that music—and can sing it, save Carl Formes. So now we went to hear him for the third—yes, though I did not know it then, for the last time.

Formes, I have said, surpassed himself. The cumulative horrors of the fiendish father were borne up on his demi-god shoulders as Atlas bears the world. My wife never took her eyes from the stage when he stood there. In the last act she clasped my hand and turned so pale that I half rose from my seat with fright. I thought the long-feared end was coming. But seeing my suffering she composed herself, and managed to endure the finale.

The moment that we got home she went to the instrument in my study, which, out of burlesque acquiescence with the Grecizing nomenclature of the times, we had called the *Kaleidophone*. I lighted the colored lamps, and I took my seat beside her. She began wandering over the strings into a memory of Roberto. First she repeated the "Vanne, Vanne," that exquisite air in which Alice brings to Robert the message of their dying mother. Thence she strayed to the Gaming Chorus. Finally she lost herself in the grand mazes of Bertramo's character, and from that moment restricted herself to expressing him alone.

It will seem incredible, I know, how, by an instrument like this, where only melody was possible in perfection, and that the slender melody of a single gamut of strings, the music of Roberto could be at all conveyed. And, truly, any but Margaret or I might have found it meagre enough for the purpose. But we knew its hidden meanings. She had translated its tension and its colors into the music of the soul. And I, though less favored than she, because I had not like her any enclosed and purely spiritual sense, from the long efforts I had made to awaken this sense in her, had at length reached some measurable perception of her interior music.

That night to me she seemed inspired. The rich hues of the lamps danced on the wall as if they were alive. The lamp which she played most was the red one. She told

me that this color was the best to express Bertramo's character where it touched humanity, but our apparatus was sadly deficient in shades of the tint. It needed at least a hundred lamps to give the representation of Bertramo's music in this particular alone. I promised her to complete the instrument according to any suggestions she might make. Alas! I have never done so. There, on my lonely wall, it stands imperfect still.

But when the fiendish side of Bertramo showed itself the colors she most used were a succession of violet and orange. As she touched the strings communicating with those lamps the room was full of lurid light, and I saw the caverns opening to receive the demon home. We forgot the simple music of the strings. We revelled in a gorgeous coming and going of rich lights, which spoke Meyerbeer's meaning as no sound can ever speak. And when at last she came to the passage where Alice triumphs and Robert is saved, the green lamp sent a mellow lustre of hope and peace through my study, in which, as on a ladder of Heaven, our lifted minds seemed to see angels passing up and down.

When this last strain of color died away, Margaret said to me: "I am very tired, dear. Let us sleep."

I took her in my arms as was my wont, and carried her like a sick child up to our chamber. I helped her undress for the night, and lay down beside her. She slept almost immediately, and as soon as I heard her beloved heart beating and her breath coming regularly, I slept also.

It was about three o'clock in the morning when her voice awakened me.

"Husband," said she, "don't be frightened—but I feel very strangely. Take my hand, please. I love to feel you by me. For I am so happy, and I hear such wonderful music that I am afraid to be alone!"

"Oh, Margaret," I answered, my own heart almost stopping with a mystical, undefined fear, "it is nothing but the effect of last night's music on your overwrought nerves. Try, darling, if you cannot sleep again. I will stroke your

forehead and lull you, as I have so often done before. Go to sleep, beautiful one! precious one!"

And she answered me:

"I feel too wide awake. I do not think I shall ever sleep again."

I watched by her side in the loneliness for an hour. Her breath grew softer and slower. I made an effort to arouse myself, to call the servants, and send for a doctor. But she clasped my hand so tightly that I feared to loose it, lest I should loose life with it. I must have been paralyzed.

At the end of the hour she spoke to me once more.

"I hear again," said she, "as I used to in the old times at the institution. The Presence is coming nearer—and nearer." Then she added faintly—"*And is close beside me. I hear again.*"

And she *did* hear. For she was among the music of the angels!

THE ÆSTHETIC ELEMENT IN PUBLIC BUILDINGS.

BY EGBERT L. BANGS, M. A., FLINT, MICHIGAN.

ELEGANT buildings consecrated to public uses have always been considered an honor to the people erecting them. At some time the task of providing such structures is sure to devolve upon every State. With many of our younger States the proper style of buildings for State institutions of various kinds is a practical question of the day. It is one which comes before legislative bodies, and it is one in which the people of the State are deeply interested.

Asylums for the insane and for idiots and imbeciles, and institutions for the deaf and dumb and for the blind, are now fully recognized as legitimate objects of State care.

Certain to be needed in every State, and equally certain to be provided where they are not already erected, they should be enduring monuments of a broad philanthropy, and no parsimonious views should be allowed to control legislative action in their behalf. There is a temptation on the part of legislators to make political capital by rocking to and

fro upon the hobby of economy, and, for the sake of popularity with tax-loathing constituents, to postpone the completion of such institutions or to build them in a manner that the next generation will be ashamed of. There is a temptation also on the part of the people who pay the taxes to reason in this way: *we* cannot afford to live in fine houses; therefore away with all this nonsense about architectural effects and æsthetics and elegant ornamentation for the benefit of classes who must be cared for at the expense of the State.

What I have to say upon this subject I say with special reference to institutions for the deaf and dumb and for the blind, and I speak particularly of these because directly interested in them. They are simply schools for exceptional classes of persons, and in this State at least they are simply a part of the educational system of the State. My only purpose in this article is to put in a plea for giving due prominence to the æsthetic element in the branch of architecture to which buildings for the classes just referred to belong.

Let us clearly understand not only what the State by common acceptance undertakes to do when she erects buildings for her unfortunates, but let us also consider what she ought to undertake. She does undertake beyond all question to give her defective classes as perfect an education as they are capable of receiving. We claim that for the benefit of such classes the State should use diligently every means of culture at her command. She should approach the minds of such through every avenue that is open. And what avenue but that of sight is or can be open to the deaf-mute? His keen eye is quick to observe whatever is beautiful, and the finer feelings of his nature can be greatly affected by the daily contemplation of architectural beauty. As a means of culture, then, I believe that it is right to spend money enough to make public buildings for such purposes models of elegance and good taste.

I have spoken of the immediate object in view in the erection of State institutions. There is also a remote object

which never should be lost sight of. A State, when she erects a public building, has a golden opportunity for giving character and direction to the public taste.

Visitors from all parts of the country are constantly thronging to all our State institutions, and multitudes of persons every year can gain new conceptions of beauty in architecture if they are allowed to see a finished specimen of it. The ideas they thus get remain with them, and little by little a higher ideal of architecture will pervade the community.

The building that a State erects in the interest of any cause is the highest possible expression of her opinion of that cause. If the building be mean and insignificant, the cause represented by it will be degraded. Elegance in the edifice gives a higher character to the work that is done in it.

I would not squander public money in gaudy display, but when a sovereign State puts before the world a building consecrated to education and benevolence, and has the money at her command, she owes it to herself to do something that men will not speak of with a sneer, as inferior to the work of private enterprise.

Pride is sometimes a virtue, and people will love best and cherish most tenderly what they are justly proud of. It is a noble spirit that calls for elegant buildings for public purposes. There is a time for all things, and in the history of every State there comes a time when æsthetic culture should receive attention. During the pioneer stage, attention must of necessity be directed chiefly to providing for the most pressing wants of society, without much regard for appearances. But in due season that stage is passed, and then it is in order to look for something higher.

I like the ideas of the old Greeks about public buildings. They studied, not only for perfection in the building itself, but they took largely into account its relations to surrounding nature. They made not only wood and stone, but hill and plain and grove and stream, pay tribute to the æsthetic element that entered so largely into their national

character. And they were wise in doing this, for the fires of patriotism burnt with a purer flame and with more fervent heat in a country that had untold treasures for her sons to be proud of. There is a narrow, mistaken practical spirit that would stop short of what is worthy and becoming for a State to accomplish. That spirit unchecked by a better public sentiment would eliminate from our public buildings as much as possible of the æsthetic element—an element that ought by all means to be cherished. Christian civilization and enlightened modern legislation ought not to go back to antiquity to be taught liberal ideas of what public buildings should be.

MISCELLANEOUS.

BY THE EDITOR.

The Proportion of Semi-Mutes.—Mr. Bélanger, principal of the Montreal Catholic Institution, writes us that he *did* understand the term *semi-mute* as explained in our circular of inquiry, and that he was correct in saying there were no semi-mutes in his institution. “Not a single one of the seventy-five pupils can hear in any other way than by vibration, and not a single one has learned to speak before becoming deaf.” The method of instruction used in this institution is “the German method, helped by the language of signs.”

The following note from Mr. Dudley shows that the proportion of semi-mutes in the Clarke Institution is much less than was indicated in the tabular statement published in the last number of the *Annals*:

To the Editor of the Annals:

SIR: In the absence of the principal, very erroneous returns were made to you through the misunderstanding of a subordinate teacher.

The whole number of pupils in 1871 was forty-four. Of these just eighteen came into the category which you intended to designate as *semi-mute*.

Of the eighteen, ten were semi-mute in the ordinary meaning of that expression, and eight had learned a few words, but not

how to put them into sentences, by the ear, before hearing was lost.

Yours, respectfully,

L. J. DUDLEY,
Chairman of the School Committee.

We may add that in our definition of the term *semi-mute*, as being applicable to the deaf who have acquired some knowledge of *language* through the ear, we did *not* mean to include those who have merely learned a few isolated words and have no power of putting them together into sentences.

The Co-education of the Deaf and Dumb and the Blind.—At the second convention of American instructors of the blind, held last August at Indianapolis, Indiana, a resolution, to the effect that it is not expedient to instruct the blind in the same institutions with deaf-mutes, was introduced, and referred to a committee of five, who reported unanimously in its favor, assigning the following reasons:

“1. Deaf-mutes and the blind differ from each other even more widely than either class differ from those having all their senses; these differences, constitutional or incidental, are such that they cannot be intimately associated without unpleasant results.

“2. The modes of instruction peculiar to each class are entirely unlike and incompatible.

“3. When both classes are instructed together, the mutes, being usually more numerous than the blind, are likely to engross a still larger proportionate share of the attention of the officers.

“4. The experience of institutions for both classes shows that, while the department for mutes prospers, and its inmates increase with the population, the growth of the blind department is almost invariably retarded.”

The committee also expressed the opinion “that in new States, where the number of blind pupils is not sufficient to warrant the establishment of an institution, it is far better to provide for the instruction of these pupils in some neighboring institution till such time as the State has some twenty-five or thirty blind pupils, and has established an institution of its own.”

The resolution was discussed at some length by several members of the convention, all speaking strongly in the affirmative, and was finally adopted without a dissenting voice. Mr. Wilkinson, of California, is the only teacher of either class, so far as we know, who has ever advocated the education of the deaf and dumb and the blind in the same institution; his reasons for favoring this plan, under certain conditions, have been given in recent reports of the California Institution.

Deaf-Mute Text-Books for Chinese Scholars.—The “Historical and Financial Statement of Forty Years’ Work at the Yorkshire Institution for the Deaf and Dumb” mentions the fact that one of Dr. Baker’s lesson-books has been translated into Chinese and printed at Hong-Kong. Dr. Legge, the translator, says in his preface to the book:

“All who have been engaged in teaching Chinese youth the English language, and the ordinary branches of an English education, have continually felt the want of school-books adapted for the peculiar sphere of their labors. The translation of Mr. Baker’s lessons was undertaken to supply this want, the translator having found them better suited for the purpose than any others he had met with.”

“The cause of this preference,” adds Dr. Baker in the “Statement,” “is very obvious to those who are practiced in the instruction of the deaf and dumb. In their early stages of learning our pupils possess but a limited acquaintance with language, and have no idea of inflexions, or of the various modifications of words. To avoid the necessity for these accessories, the lessons referred to by Dr. Legge were composed in short sentences, abounding in nouns, adjectives, and verbs, expressive of sensible ideas. The sign-language of the deaf and dumb, into which they translate written language, consists, like some of the Asiatic languages, of only radical signs for ideas, which admit neither of inflexion nor composition: thus the same expression is given by them for *joy*, *joyful*, *to rejoice*, exactly as in the Chinese language. The lessons, therefore, intended for such pupils, convey knowledge more rapidly by dispensing with the refined accessories of a copious and matured language, and are at the same time suitable for those peoples whose imperfect languages must keep them in the cradle of their species. The same observation is applicable to an ignorant population at home.

"A more advanced volume of the same series was selected and printed especially for the use of the boys in the government schools of India, under the sanction of the department of public instruction in the Punjab."

Pretended Restoration of Hearing.—Some of our readers may remember a "remarkable case" described in the *Annals* last year, (vol. xvi., page 52,) of a young man whose hearing was said to have been so far restored by a course of "psychological and medical treatment" that he could "hear the sounds of the human voice distinctly, and imitate them with a precision perfectly astonishing." There certainly seemed to be sufficient testimony to his recently-acquired ability to hear loud noises and utter some words and letters, and the woman who was treating the case promised perfect restoration of speech and hearing. But more than a year has passed since then and nothing further has come of it; not the least permanent benefit was conferred; the doctress is richer and the deaf-mute is poorer by the fee of fifteen dollars which he paid for the pretended cure.

The Manual Alphabet in the Hour of Death.—One of the benefits of a knowledge of the manual alphabet is the use which may be made of it by the dying to communicate with their friends, when the voice has lost its strength and the lips refuse to speak. We recall some precious utterances of this kind; the expression of last wishes, messages to loved ones, words of faith and peace and happy hope. The latest that has come to our notice is that of Grace Aguilar, whose "Days of Bruce," "Home Influence," and other writings, are so well known. In her final illness, after the power of speech was gone, she conversed with her friends in this manner, and her last words thus expressed were, "Though He slay me, yet will I trust in Him."

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FOUNDATION WORK.

BY REV. BENJAMIN TALBOT, M. A., COUNCIL BLUFFS, IOWA.

It has been often hinted in the *Annals*, since its revival in 1868, that we are possibly retrograding or degenerating in the instruction of the deaf and dumb. After making all due allowance for the difficulties under which deaf-mutes and their teachers labor, we find yet too many things that give strength to these apprehensions.

Teachers of advanced classes, and even professors in the college, groan constantly over the deficiencies and shortcomings of their students. The daily and hourly task of correcting mistakes that should years before have been eliminated from the language of the pupils; the continual need of repeating information and instruction that should long ago have found a deep and permanent lodgment in the pupil's mind, and yet should be at the surface ready for use; the frequent failures to attain a high standard of scholarship; the *mutisms* and errors that so often appear in the independent and uncorrected composition of the average deaf-mute; and, in short, the lamentable distance between opportunity and achievement, between aim and result, are at once painful and mortifying to the conscientious teacher, and should be full of shame to the pupil.

For these evils there must be some cause, and, unless they are absolutely unavoidable, and so, of necessity, constant, there must also be a remedy.

Without assuming to prescribe a panacea that shall remove them all, and by one stroke open for the deaf-mute the still undiscovered "royal road" to knowledge, it may be well to suggest one thing, which all will admit to be indispensable—the need of thorough elementary instruction.

In this age, and especially in this country, there is everywhere too great haste to secure visible and tangible results, without the labor of patient preparation; and the spirit of the age has crept into our institutions of learning, high and low, and into schools of every grade. Even teachers and professors are too often mere smatterers; brilliant and showy, forsooth, but with a woeful lack of thoroughness and completeness of learning and knowledge—at once deceiving and deceived.

Teachers of the deaf and dumb may fall into the same error. Knowing that certain results are expected from their labor, stimulated at times by a rivalry to surpass the achievements of other teachers, and even yielding weakly to the demands of their pupils, they push their classes on too rapidly, and in the end prove that "haste makes waste."

Our teachers must never forget that a large part of their work is elementary; that they are to lay the foundations of education and culture in the minds of their pupils; and that unless these foundations are well laid, they cannot hope for any success in erecting the superstructure. As, in practical architecture, the foundations must be of good material, laid broad and deep, on finely-broken stone well mixed into a good concrete, so the elementary instruction that goes into the foundation of the temple of knowledge should be carefully selected, minutely divided, and well compacted, before any of the upper courses are laid.

This is especially important in teaching verbal language. Whether this instruction be after the models from textbooks now in use, or in the more desultory form adopted by some, and claimed by them to be more natural, it must be

thorough to be of any value. And so in all other branches of instruction. The underlying principles must be firmly established in the pupil's mind; if not by theory and definition, then by constant and accurate practice, so that the mind, when turned to any given branch, shall work correctly and promptly, and give the best results in the shortest time. And this thoroughness must be applied at the very beginning, for all later efforts to secure it will generally be sorry failures.

Down in the very *hard-pan* of ignorance, with the pick of ingenuity and the shovel of industry, must the workman prepare a bed for this foundation, which he is to lay with the sledge of assiduity and the trowel of patience. If the work requires time, then time must be taken; for on the thoroughness of this primary work depends the future success of the pupil. Unless the foundation is well laid, flaws and cracks will be seen in the superstructure, and the higher the walls are raised, the more glaring and conspicuous will be the defects.

And woe to the builder if these appear! Did he not know the nature of the ground on which he was building, and the kind of materials he had to use? And, knowing these, should he not have used all diligence to lay his foundations at the proper depth and of the proper thickness, that so his work might not be marred for all time by his carelessness or neglect?

Let the teacher answer these questions in his elementary work. Let him not, from any ambitious desire of display, sacrifice real to apparent progress, but let him patiently labor to secure a thorough foundation as a groundwork for future effort.

His pupils, especially if somewhat advanced in years, may desire to use high-sounding words and to write long and complicated sentences, that they may escape the appearance of being babes in knowledge; but these aspirations must be put under proper restraint, and the teacher must exercise all his ingenuity to secure the patient and willing co-operation of his pupils in this elementary work. He must

first persuade himself, and then convince them, that simple words, short sentences, and simple forms of knowledge well understood, are worth infinitely more than the jargon of language and of knowledge that makes up the composition and the mental furniture of the half-trained deaf-mute.

Of course, each teacher must devise for himself the best way to hold the attention of his pupils, and to secure in them that close application which will insure their advancement. There are, however, two requisites in the form of instruction that may be laid down as indispensable—simplicity and repetition.

Simplifying and explaining till there is no excuse for ignorance, and repeating and reviewing till there need be no failure to remember, ought to insure perfect knowledge perfectly retained. It will not do, in teaching deaf-mutes, to take it for granted that they know anything which has not been in some way explained to them. Knowledge, on their part, must never be assumed, but must always be tested; and if it is found that this is lacking, the want must be supplied. Neither is it safe to trust their memories without frequent reviews to make sure that they retain what they have once learned.

By a careful and constant attention to these two principles, both the forms of language and the elements of knowledge may be kept at their fingers' ends, always ready for use. The immediate and apparent progress of pupils thus trained may not be so great as that of others; but one may feel sure that a good foundation is laid, and that their future progress and ultimate attainments will be far greater than if the training were less thorough.

Let the teacher of a primary class patiently and faithfully lay such a foundation as is here suggested, and he will have the satisfaction of seeing built on it—if not by himself, by some one else—a fair and imposing mental structure, solid and firm, yet beautiful in its symmetry, and adorned with all the graceful finials and rich tracery of a complete and thorough education.

THE KENTUCKY INSTITUTION AND METHODICAL SIGNS.*

BY CHARLES H. TALBOT, M. A., DANVILLE, KY.

IN reading the recent literature of our profession I am repeatedly reminded of the saying of the wise man—that there is nothing new under the sun. In our efforts to improve and simplify the methods of deaf-mute instruction we seem to be moving around somewhat in a circle, if not running around in a groove. The late discussions concerning the best order in which to use signs in teaching deaf-mutes the English language seem to be but a revival of the old controversy that was carried on some fifteen years ago, through the pages of the *Annals*, by Messrs. Jacobs, Burnett, and others. And while—aside from morals—this is one of the most interesting and important questions that has ever engaged the attention of the profession, I confess experience leads to the entertainment of serious doubts whether the renewal of the discussion will result in any permanent good, commensurate with the expenditure of time, labor, and printer's ink. This is a question upon which the profession is not likely to be brought to one mind; perhaps the most practicable and pleasant way of disposing of it will be by an agreement to disagree. There was a time when I thought the day would come when the advocates of the system of teaching with the use of the natural language of signs only would occupy the field alone, as almost all of the new institutions in the West are manned by graduates of institutions where this system is followed. But recent developments indicate that I was mistaken in my prophecy, and bring to light the gratifying fact that the advocates of the system of teaching by methodical signs—the same system, in substance, which was so long held and practised and so ably defended by Mr. Jacobs, late principal of the Kentucky Institution—are increasing rather than diminishing. No-

* “The Sign-Language,” by Rev. J. R. Keep, M. A. (*Annals*, vol. xvi, p. 221.)—“Natural Signs—Shall They Be Abandoned?” by the same author. (*Annals*, vol. xvi, p. 17.)

where is this increase more marked and decided than in the young and growing West. It affords a fine proof of the value of the seed sown years ago, and illustrates well the story of the skilful finding diamonds in those things which others have cast away as worthless stones. To correct error, rather than to recommend any system or method, is the chief motive that leads me now to break my hitherto unbroken silence upon the subject of the methods of instruction. And the principal thing that urges me to this publication is some criticisms made by the Rev. John R. Keep, of Hartford, in one or two of his recent articles in the *Annals*, upon the method of teaching by methodical signs, and some strictures upon this method as practised by the late Mr. Jacobs. It is but just to say that the impression which his article entitled "The Sign-Language" sends abroad is, that the system of Mr. Jacobs was one at least fanciful, if not absurd, and only an offshoot of one that was long ago discarded as the hallucination of a less intelligent age. A stranger, desiring to become acquainted with the best methods of instructing the deaf and dumb, and reading over the literature of the profession for information, would certainly get the impression from Mr. Keep's article above mentioned that the theory and practice of teaching at this institution were considered impracticable, and long ago abandoned for *improved* methods in the oldest institution in the country. If Mr. Keep's statement of Mr. Jacobs' system was accurate, there would be ample foundation for the criticisms which he made, and for others even more severe. But I hope to show that Mr. Keep's impressions are far from correct, and that, so far as this institution is concerned, this literary vandalism—this breaking up of the grand old sign-language into its constituent elements, and its reconstruction into a new one, modelled after the English idiom—which the advocates of methodical signs have undertaken and recommended, is not the scholastic delusion nor the insane destruction of time-honored institutions which it is represented to be; is not a revolution backward, but one forward and upward; for I am willing to be classed with those who give in their adherence to this

system, and believe that it is founded on correct natural principles, and that Sicard, though committing many blunders, such as are nearly always incident to first attempts, "buildd better than he knew."

If Mr. Jacobs had never made any publication of his method and of the principles upon which it was based, that he should be misunderstood would occasion no surprise. But he has written so much and so plainly that I had not thought, until recently, that there was any room for misapprehension. And as he has by his book of *Lessons*, and by articles in the *Annals*, put himself before the profession as an authority upon the subject of the philosophy of signs and of the methods of instruction, I think his friends are fairly entitled to a hearing in his behalf. But what I shall undertake to say in reference to his system will be more concerning its practical working in the school-room than as to the correctness of the theories or principles which form its foundation, for he clung to no abstract speculation which would not endure the rigid ordeal and test of school-room practice.

According to Mr. Keep's interpretation, the system of Mr. Jacobs was "based on the same idea as that of Sicard, viz: that unless the order of words in written speech is indicated by signs made in that order, written language will never be really mastered by the deaf and dumb." This affirmation, taken as a premise, Mr. Keep thinks, drives one inevitably to a conclusion which is an absurdity. But his reasoning is based upon an entirely incorrect assumption, for I do not understand Mr. Jacobs anywhere to assert that the ordinary congenital mute can, by the aid of signs in the order of the words, or by natural signs, or by both, thoroughly master the English language. On the contrary, he sorrowed continually, as have many others in the profession, that by all the methods of instruction of which he knew anything, he was unable to give his pupils a complete mastery of language. But he practised teaching by signs in the order of the words for this reason: the idiom of the sign-language is so different from that of the English, that a deaf-mute, to whom the ideas of the English sentence were always con-

veyed solely by signs in their natural order, would encounter far more difficulty in interpreting his thoughts in correct English than would one before whom, during instruction, the English form and idiom were continually presented, by making a sign for every word in the order in which it occurred in the sentence, and that the work of acquiring the command of the English idiom would be accomplished, not only with more facility, but also in less time, *if ever accomplished at all*, than if he were compelled to translate always from colloquial signs. By continual repetition and association of the words and signs together in the English order, the deaf-mute falls into the habit of expressing his ideas in the English form more readily than when he is compelled to make a leap over the chasm which yawns between signs and the English language, which oftentimes seems to be for him a blind leap in the dark. But granting that the advocate of methodical signs holds to the doctrine of Sicard, as quoted above, I do not perceive that he is narrowed down to the conclusion to which Mr. Keep would force him. His argument is, that the advocate of this system affirms that unless the mute is taught by signs in the order of the words, he will never learn to write English correctly, and that he will in all fairness admit also that such ideas as are easily comprehensible by children are expressible in the sign-language; and then, if he makes this admission, "he shuts himself up to the absurdity of saying that a perfectly clear idea of the thoughts contained in a sentence may be communicated to the mind, yet the sentence itself as given in signs not be translatable into verbal language." The logical sequence is not very apparent here. It strikes me simply as a *non sequitur*. Moreover, any form of statement of the fundamental principle of this system which justifies the inference that by methodical signs deaf-mutes do master our language is radically incorrect.

Again, it seems incomprehensible to the opponents of this methodical system how clear, accurate ideas of occurrences may be communicated by means only of signs in the order of the words. For, say they, the sign-language is a

pictorial language, and actions, occurrences, or a series of actions, must be represented before the deaf-mute by a pantomimic reproduction of them, and unless this is done, only a dim glimmering of the ideas in a sentence can be conveyed to him. It is true the sign-language is pictorial in its character and founded on pantomime, and scenes described in it must be made to pass before the mind as present, etc. But I am disposed to differ with Mr. Keep as to the vividness and fullness of the ideas that can be communicated to mutes by signs in the English order, in connection with words. And just here is one of the main points of difficulty with the opponents of methodical signs in understanding and approving Mr. Jacobs' system. Mr. Jacobs used signs methodically only in a rational, practicable way, and only in connection with other processes which rendered it certain that the mute clearly comprehended the language taught. Before undertaking to teach a sentence by signs in the order of the words, he would take up every difficult word and idiomatic phrase—such words and phrases as would not be readily comprehended by the pupil from seeing the succinct natural signs for them—before entering upon the sentence itself, thus removing all cause for obscurity, and avoiding the necessity of too much use of natural signs. Persons present are selected to represent persons described, and diagrams are made to represent the relative position of distant places. All previous elucidation and illustration are given in the natural language of signs, except so much as is given in written examples on the most difficult words and phrases, these being dictated by the manual alphabet, in simple language, and taught by methodical signs. Then, when difficulties and obscurities have all been removed, the sentence is spelled over by dactylology, and explained word for word by signs for each word, in the order in which it occurs. Thus the words all being easily understood, the pupil encounters but little difficulty in taking in the meaning of the whole sentence. While those who teach by the natural method, as I understand it, take up a sentence or passage containing divers

new, difficult words, without any previous explanation and illustration of words and phrases by either signs or written examples, and teach it by spelling it over, and then giving a free translation, or rather interpretation, in natural colloquial signs. As a matter of course, the pupil will not, and cannot, comprehend the meaning of it without a good deal of circumlocution and digression—a dwelling now upon this word and then upon that, and then upon the main thread of thought—and, withal, a very liberal use of the natural language of signs, and often even of pantomime. By the latter method, the mute may get a very good idea of the meaning of the sentence as a whole, but he will assuredly have but a dim and shadowy idea of the signification of many of its words and idiomatic expressions—so very vague that he will hardly be able to treasure them up in his mental storehouse and make appropriate use of them upon occasion; while by Mr. Jacobs' method he will have a clear perception, not only of the meaning of the sentence or passage, but also of the individual words. I have spoken of this method of illustration of words by example as a part of a system originating in this institution. Teaching deaf-mutes by written illustrative examples on the use of words certainly did not originate with Mr. Jacobs, but the manner in which this exercise is employed here is, I think, undoubtedly peculiar to him and to this institution. Mr. Jacobs once told me that when he went to Hartford to learn the sign-language it was the custom there to teach a lesson, and afterwards, if the teacher thought any of the words had not been fully comprehended, illustrative examples were taught. This practice he pursued for some time after returning to Kentucky. But one day, many years ago, when the teacher had to prepare manuscript lessons for his class, he accidentally got his examples written in his blank-book before the lesson, and finding the lesson so much more easily explained and understood after teaching the examples first, he followed this plan ever after. As far as my acquaintance extends, this laborious work of illustration and exegesis of words beforehand is not practised any-

where else. Few teachers have the patience to go back and pick out all the difficult words of a lesson already taught, and elucidate them one by one. The disposition is to hurry on to new and more interesting matter. This much I have digressed to relate, lest I be chargeable with claiming for our late principal more than was his due. To proceed: without this previous illustration and exegesis there are sentences of almost daily occurrence in the routine of lessons which no teacher can explain without a protracted and vigorous use of colloquial signs. Take, for example, the sentence about the Kentucky legislature,* which was given in signs to the pupils of the high class in the American Asylum, to be written out in their own language: *Mr. Day said a few days ago, in Boston, "I noticed lately that the Kentucky legislature voted to remove their capital to some place 'hereafter to be designated;' in other words, that it should be put on wheels, until, in their mode of doing things, the location should be raffled for."* The apology was afterwards made that this sentence, being a difficult one, containing new and figurative words and slang phrases, only a partial idea of it could be given to the pupils of the high class, even in natural signs, and that therefore they could render it very imperfectly in language of their own selection. Now, with reference solely to giving a class of deaf-mutes a distinct idea of such a passage as the above, of both words and thread of thought, I am firmly persuaded a better idea can be conveyed by the aid of previous illustration and methodical signs than can be given by a free use of colloquial signs only, and that it can be done with fewer signs.

Again, while scenes and actions are depicted to the mind of the deaf-mute most easily and vividly by the natural language of signs, and communication in this language is most congenial to him, yet it is conceded on all hands that to learn to understand and use a written, cultivated language, he must learn to conceive of things as do those to whom

* See *Annals*, vol. xiv, page 91.

this written language is their vernacular. How do we, whose mother-tongue is the English language, conceive of things, and get accurate ideas of scenes and actions? Having a thorough knowledge of the signification of words, and of their relations to each other in a sentence, when familiar words are joined together in a sentence we are able to form in our minds a picture of the scene or action the ideas of which are embodied in the sentence. Having the elements of a picture, we are able to put those elements together into such relations as to portray to ourselves such combinations as are sufficiently full and accurate for all practical purposes. Do not we all, in reading works of fiction, as the Waverly novels, for example, in which are given vivid and faithful descriptions of persons, scenes, and actions, depict for ourselves mental pictures of these as we read them? We know what a hotel is, and what a stairway, and a landing on a stairway, and a pistol, and a man, and the action of walking, and the firing of pistols, and wounding and falling down, etc. Well, then, when we read in a newspaper that Stokes stood on a landing on a stairway in a hotel in New York, and fired a pistol down the stairs and shot Fisk as he was coming up, and that Fisk fell back wounded, etc., we picture this scene to our minds with sufficient fullness and vividness without the aid of a great wood-cut to make it intelligible. So the mute can do—must do—does—if he attains any substantial familiarity with the English language. If I say to one of my little pupils who has progressed far enough to understand the words, “*Go and bring me a drink of water, and I will give you an apple,*” I feel pretty well assured that while she is gone on the errand she is forming a picture in her mind of her teacher taking an apple from his pocket or table-drawer and handing it to her, without the necessity of my describing the action to her beforehand in natural signs or in pantomime. So, I do not perceive the slightest difficulty in interpreting clearly to a class, by the use only of natural signs used methodically, the examples given by Mr. Keep in his last article on the sign-language, viz: “*A man stamped on a snake’s head;*” “*Two*

boys were fighting. One struck the other. The other struck him. Both were angry." In the first example, by a full explanation of the words beforehand, and a judicious use of methodical signs, and using the old grammatical sign to denote the relation of the verb to its object, and all this coupled with the pupil's ability to form a partial idea himself of the act, I perceive no obstacle in the way of his understanding the sentence. In the second, selecting two boys present in the class to represent the boys fighting, and describing the scene as though the two boys present were the actors, the teacher, if he understands the sign-language thoroughly, will be able to give even to the most ordinary mute, by signs in the order of the words only, a vivid enough portrayal of the fight, even to the angry countenances of the parties. Of course, sentences like the above may easily be taught the deaf-mute in colloquial signs only long before he can understand the English words that compose them; but I am speaking now of the mute under instruction, for whom the difficulties of language should be graduated to his ability to understand and overcome them. Signs in their natural order, pictures, diagrams, apparatus, everything in reach being freely used in the exegesis of words, there remains no necessity for anything beside signs in the order of the words, and oftentimes not of these.

I think we "honor" a pupil's "capacity" more when we give him a sentence, the words of which have been explained to him beforehand, and let him try to form an idea of its meaning unaided, than when we translate the whole to him in the sign-language without any effort on his part. In the latter case, I think he is decidedly in "leading strings." He is taken under the arms, as it were, and lifted along without any encouragement to mental exertion; in the former, he is encouraged to grasp at the idea himself, and depend on language for ideas, and not alone and always on signs. But it is not worth while to discuss this point further, for upon this part of the subject of instruction the advocates of the two systems will not be likely to agree.

In summing up, then, I believe one of the most important differences between Mr. Jacobs' system and what may be called the natural system is in the *use* of the natural language of signs. Mr. Jacobs would use it in the elucidation and exegesis of words, while Mr. Keep would use it in the explanation of the text of a lesson; and Mr. Jacobs would use both colloquial and methodical signs, while Mr. Keep would use only the former. The two systems may be illustrated by the figure of the agriculturist bringing under cultivation a piece of new ground. The advocate of the natural system would plough around stumps and stones and roots, while Mr. Jacobs would pull out and clear up all obstacles and impediments beforehand, and be able to go forward without halting, and make a straight furrow. If asked what is the gain in using signs in their natural order *on words* only, it is sufficient to reply that it is the form of expression—the order of the words—that is to be impressed upon the mute's mind, as much as the information contained, or more. It is not to be denied that examples can be produced which it would be exceedingly difficult to teach well by methodical signs; yet the rule is not invalidated on that account. On the other hand, many examples can be found which it would be impossible to get the mute to use correctly by giving him sentences in signs to be translated into written language, because they contain forms of expression for which the sign-language has no equivalent.

Then, these logical and conjunctive particles in our language, which are wanting in the sign-language, can be taught by illustrative examples and methodical signs, and the mute enabled to comprehend their value and use. By natural signs, and without illustration, I do not see how they can be taught at all fully; and those other words and idiomatic phrases of which our language is so full, and which have no equivalent in the deaf-mute vernacular, may thus be thoroughly taught and explained. According to Mr. Keep's own admission, the sign-language is very limited in its range. A pupil, therefore, whose school exercises are limited mostly to the translation of sentences from collo-

quial signs, will necessarily have a very limited vocabulary and range of language. We would have him made able to go beyond the range of natural signs, and express readily in language ideas which he could not express without difficulty in signs. We would have him become familiar with a wide range of forms, and be able to read and understand what he could not write. By the method pursued, all forms of expression may be taught; and the beneficial results of teaching by illustrative examples have been found so great here that it is kept up through the whole course. In the younger classes, the most difficult examples are preserved and studied and recited, while in the highest class they are only given orally during recitation; and the pupils are required, in all cases, to form examples of their own upon each word illustrated, to test the accuracy of their knowledge of its meaning.

Again, Mr. Keep argues that the structure of the sign-language is so different from that of the English that the collocation of signs in the order of English words so utterly destroys the structure of the sign idiom that the signs are unintelligible to the deaf-mute, and fall upon his eye as dull, meaningless forms. There is, undoubtedly, too much stress laid upon this point. That the words of a sentence may suffer considerable inversion or transposition all our written languages afford ample evidence. The poetry and prose of many of the best writers in our own language are sufficient to cite as examples of this. And I am loath to admit that the transpositions, even in our poverty-stricken language of signs, rendered necessary in using the signs methodically, are productive of that complete mental obfuscation which the opponents of this system affirm. Children can be accustomed to one form of idiom as easily as another. Mr. Keep gives it as one of the most striking features of the sign-language that the object is placed before the action.* In using signs in the order of the words, we simply place the action before the object. In signs, the adjective, so to

* *Annals*, vol. xvi, page 224.

speaking, is placed after the noun. In conforming signs to the English order, this order is reversed. These inversions certainly are not destructive of all clearness of ideas; every English-speaking person who learns French must learn to make the same transpositions. There is a limit in the transposition of words, beyond which all force and perspicuity are lost; but I have the very best of proof that we do not go beyond it in using signs methodically. But the test of facts is the best test. Deaf-mutes would not be apt to like any plan that was not intelligible, and I find by inquiry that they nearly all of them prefer teaching by dactylology and methodical signs to lessons taught by natural signs from the black-board. And we have the testimony to this effect of intelligent educated deaf-mutes, who have been under instruction in different schools, and have been taught by both methods.

As to the question of what gives facility in writing, both the free and the literal translation of sentences from one language to another have their value. The habit of giving free, off-hand renderings in translation gives great facility and command of language. But the slavish literal translation of word for word has a value of its own, which ought not to be despised. It helps to give the student an accurate knowledge of the structure of the language he is acquiring, which is indispensable, and upon which true facility and accuracy in translating very much depend. By it is obtained a clear perception of the genius and idiom of a language, and a much greater confidence and command in the use of it. No one can be said to have a perfect command of a language who does not understand the exact meaning of its words, although he may be able to express his ideas in it. My own experience in the study of language is that literal renderings enable me to retain peculiarities and idioms far more easily and readily than a free translation of the ideas alone. The construction of a sentence according to the idiom of a foreign language, and in the words of our own, is a sort of stepping-stone over which we may go steadily and with confidence. On this account, then, an *ordo* is valu

able. But I would not have the *ordo* of Virgil. That was to the student of Latin what English is to the mute. I would reverse the process, and have an *ordo* of signs, not of English—not of the language he learns, but of his own vernacular. Most children must learn to crawl before they can walk; so deaf-mutes, on learning the alphabet, do not, Minerva-like, spring full-fledged into the command of a nice, smooth style of composition. The difficulties, moreover, of the speaker of one cultivated language in acquiring the knowledge of another such language, are far less than those of the deaf-mute who, with his meagre language of signs and his restricted means of communication, undertakes to master English. The problems in the text-books of arithmetic, which the speaking pupil can solve easily and without help, are found posers indeed to the mute, even with the best help. So, in learning language, he needs much more assistance than one blessed with a knowledge of sound. He needs just that kind of assistance which is given by signs in the order of the words. And if we can enable him to understand the forms and meaning of language by such signs, what need is there of any natural colloquial signs?

Methodical signs, to be used effectively, must be used as we use them. A new teacher, accustomed to a different method of teaching, who, in order to test the practicability of this Sicard-Jacobs system, should take up sentences from geography or history, and undertake to teach them by making a short sign for each word in its order, would soon find himself in deep water, and jump to the conclusion that it was a cumbersome and unwieldy, if not nonsensical process, and greatly inferior to colloquial signs. Our late principal, though a strong advocate of the use of methodical signs, never sacrificed any substantial good for the sake of a mere philosophical idea. He always impressed strongly upon the young teachers around him that if they failed to make their pupils understand their lessons by the use of signs in the order of the words, by all means to use colloquial signs—pantomime—mimicry—anything—until they were fully satisfied they had made plain to the pupils the matter

in hand. He considered *perspicuity* an essential quality of good signing, and therefore he made it the first among the rules for signing given in the preface to his Primary Lessons. He used to tell us that it was a rule of Dr. T. H. Gallaudet, (and he thought a good one,) in the explanation of any difficult part of the lesson, to keep his eye on the dullest pupil in the class, and if this one caught the idea, the rest would. This is certainly a safe rule to follow for the pupil, but not the most pleasant one for the teacher. It ought to be an easy matter for a teacher to know whether or not his instructions are thoroughly apprehended by the pupil, whatever the method he may employ. And any order of signs in teaching that is not both intelligible and improving to the mute ought to be abandoned, and forever. For, unless our signs are perfectly intelligible, no real, substantial progress can be made, either in general knowledge or in the acquisition of language.

It is a fair inference from Mr. Keep's treatment of the subject of methodical signs that he supposes that where they are used in instruction, colloquial signs* are banished from the institution, and a language reconstructed out of the ruins of the sign-language is inaugurated in its stead, and required to be used for all purposes and at all times. Hardly anything can be farther from a correct impression as regards this institution. To undertake to require deaf-mutes of every stage of progress in education to use signs in the English order out of school is to undertake to perform an impossibility, and is simply ridiculous. No one was better aware of this than Mr. Jacobs. He never required the use of signs in the order of the words, except in the hands of the teacher and in the school-room. His pupils used the sign-language, and were permitted to use it out of school *ad libitum*. His own rule, however, was never to permit them to communicate with him by signs. Unless the case

* By *colloquial signs* I mean the sign-language, or the use of signs in their natural order, and this only; by *methodical signs* are meant natural signs, used in the English order; nothing more.

was urgent, he required the pupils to make known their wants to him by writing or by the manual alphabet, thus requiring of them daily use of the English language out of school. And notwithstanding our pupils are taught lessons by signs in the order of the words, I have never observed that in conversation they used their vernacular with less perspicuity, impressiveness, and readiness than the pupils of other institutions where methodical signs have been discarded. I taught one pupil a few years ago who frequently used signs in the order of English words in talking to her companions, and she seemed never to have the slightest difficulty in making them understand her. It was a curious case, and the only one I have ever met with in fifteen years of intercourse with deaf-mutes. I think it "Quixotic," indeed, to suppose that the advocates of methodical signs encourage and require the use of them out of school. It might as well be argued that because it is necessary to have speaking pupils decline nouns, conjugate verbs, and compare adjectives in order to teach them grammar, it is absolutely necessary to require them to go through various inflections and declensions of the words of every sentence spoken upon the play-ground as soon as it is uttered.

Though the method of giving religious instruction in this institution was published some years ago, it seems necessary to put on record a second time that methodical signs are not used in giving moral and religious instruction. On the contrary, upon these subjects the teacher is expected to use colloquial signs to an extent that is limited only by his ability to do so. And if any of the opponents of the methodical system should retort upon us that the fact that we always use colloquial signs only where we wish to convey clear and important ideas is a confession that signs used methodically are inadequate to giving proper lucidness and vividness to our instructions, our reply is, that they are not used here for various considerations, some of which may be given. The language of the religious text-books is so simple and plain and easily understood, that but little illustration is needed. And the time of giving religious instruc-

tion—the Sabbath—is not proper for such exercises. The illustrations and explanations of the weekly lessons in the class-room remove, in great part, the necessity of any illustration. The *superficial* meaning of the text is easily conveyed, therefore, and the language is of secondary consideration. In religious instruction, the prime object is not to teach language and grammar, but to make an impression upon the heart of religious truths and duties. And in teaching the Bible the chief difficulty and labor is not with the language, but in bringing out the figurative and profound spiritual meaning of the text, and the effort to draw from it the lessons which will affect the heart and life of the deaf-mute. And methodical signs are not at all adapted to this purpose. The sign-language in such cases is the only proper means of instruction. Within its compass, as an instrument for making lasting and affecting impressions upon the soul, it has no superior among the languages of earth, so far as my knowledge of language extends. The fundamental truths of the Gospel are repeated over and over so often in the Bible that whatever may be lost by obscurities of language at one time may, by proper diligence, be gained at another: But the plain sense of the text *may* be taught by methodical signs, if any one desires. Certainly, Dr. Peet's Scripture Lessons and the Gospels may be thus taught, if anything can.

I hope, then, from the foregoing explanation of the extent to which the methodical system is followed here, that it will be understood it has never been erected by either the past or present administration into a Procrustean bed, upon which the forms of language are laid, and to suit which everything is sacrificed, even to the good of the deaf-mute, in order to meet its requirements. If there is anything good in this system, as modified by Mr. Jacobs, it will bear criticism, and even ridicule. And it is no little consolation to us, who are teaching by methods which he upheld alone, I believe, for long years against strong opposition, that, after his death, these methods are gaining rather than losing in estimation. It is something of a straw in the wind of doc-

trine that from the president of the National Deaf-Mute College we should have a word in favor of teaching *by signs in the order of the words*.* From one in his high position utterances upon the methods of instruction are not likely to be published without mature consideration and strong assurance of correctness. From the signs of the times, who will gainsay that it is possible the "cumbersome and unwieldy" machinery which was tumbled overboard at Hartford so willingly, in 1835, may yet be brightened up, and be found the best machinery after all? All that is necessary to use it to advantage is to put on a governor, and not use it to excess, or run it into the ground.

But whatever may be said of methodical signs as an inferior means of instruction, they are infinitely to be preferred to that method of using colloquial signs which I have seen practised, viz: writing upon the black-board sentences full of difficult words, and then pointing to each sentence in turn, and giving its meaning freely in the sign-language, without making any signs whatever for the individual words. Teaching by illustrative examples and methodical signs is undoubtedly a more laborious work than by colloquial signs alone, and this plan may be rejected by some on that account. By the latter method, the teacher may get over the pages of his text-books more rapidly; but *hasten slowly* is a good motto. All progress is not advancement. While, by the methodical system, progression is slow, greater thoroughness is secured; and ample compensation is found in the fact that pupils may be advanced from one text-book to others more difficult with greater ease and rapidity than by any other plan ever tried here. It has recently been objected† to Mr. Jacobs' book of Primary Lessons that in it sufficient attention was not paid to the "graduation of difficulties." This little book is but an outgrowth and exponent of the system followed in this institution for forty years; and whatever objection may be made to it as to "philosophical order and the graduation of

* *Annals*, vol. xvi, page 32.

† *Annals*, vol. xv, page 247.

difficulties," may stand as an objection to the whole system of instruction. But no difficulty has ever been found here in the graduation of difficulties in this book, for, since it has been in use, classes have been prepared for such studies as geography and history fully a year sooner than before its publication. If, then, those things which seem insuperable difficulties to others by the methodical system vanish like thin air, it is an undesigned testimony and compliment of no trifling character to its value and correctness, for which, in my own name, I tender thanks to those who have thought fit to bring forward this objection.

This article has grown to a much greater length than I had anticipated. I will say only one word as to the relative results of the two systems of instruction. I have tried both for my own satisfaction. I have seen pupils brought together who had been taught by different methods, and sufficient opportunity was allowed for comparison, and my observation has been that those deaf-mutes who are taught by colloquial signs make a far worse jumbling up of words in composition than those taught from the beginning by methodical signs. It is found, moreover, that the average of congenital mutes taught by the latter method are quite as well informed and write as well as the average of pupils who have come to us from other institutions that discard it. This institution has no high class; yet it can show graduates who have attained nearly a perfect command of the English language, and who write with quite as much correctness as any I have met with who have been educated under a different system.

The use of methodical signs may be protracted too far in the course of instruction. There is a time in a seven years' course when I think the highest good of the pupil will be attained by ceasing to give him instruction by *any system* of signs, and throwing him upon his own resources, and requiring him to dig out the meaning of his lessons by his own exertions as much as possible, and aiding him with the sign-language only in difficult places. But I will not stop to discuss this point now.

Mr. Jacobs wrote much upon the subject of methodical signs and but little upon the sign-language, yet it is a great mistake to suppose that he undervalued the latter as a means of deaf-mute instruction. I doubt whether any member of the profession put a higher estimate upon it, when rightly used. Not only so, but he added much to the language in the way of new signs, and rules for signing, that have proved of immense value to his successors. He took great pleasure in instructing the young teachers who were trained up in this institution in the knowledge of the sign-language, and was very careful in correcting them in the errors they were likely to fall into by association with partially-educated deaf-mutes. He highly valued the instructions he had received from Mr. Clerc, and strongly impressed upon his teachers and pupils here the great worth of Mr. Clerc's labors in transmitting an accurate knowledge of the sign-language to American instructors. All that Mr. Jacobs did, in the way of changing the system he learned at Hartford, was to modify it. And certainly it needed modification, if Mr. Keep has given us a correct statement of its leading features. For to make the grammatical sign, together with the natural sign, for every word, every time it was used, must undoubtedly have been a wearisome labor of soul and body to both teachers and pupils.

The sign-language will eventually degenerate greatly unless the utmost care is exercised in its transmission from generation to generation of speaking teachers. I once made the acquaintance of a gentleman who had been the principal of a state institution. He had accepted the position without having the slightest knowledge of the sign-language. He told me that when he had applied to a distant institution for instructions as to how to proceed to acquire it, he was informed that if he could find a deaf-mute who had been educated he could acquire it from him. When I saw him a few years after, he had given up the profession, as if in disgust. This acquisition of the language by association with pupils and other partially educa-

ted deaf-mutes, if practised to any great extent, will so adulterate it that it will soon be hardly intelligible. Though deaf-mutes may use the language with the greatest facility and grace, few of them understand the structure of it, or the reason and origin of signs. Even educated deaf-mutes are in the habit of abridging and syncopating, so to speak, very many of their signs in their conversations with each other, which, while they are perfectly significant to them, convey but little meaning to the speaking student of the language, and some signs are so changed as to bear scarcely any resemblance to the beautiful original. I have observed with some astonishment that pupils from different institutions do not always understand each other when talking by signs. This arises from the fact that different signs are made in different institutions for the same thing. And should variations in the sign-language go on for the next hundred years to the same extent that they have in the last forty, the glorious, universal, natural language, of which the pioneers of the profession used to speak so proudly, will have settled down into a score or two of provincial dialects. And while not praying devoutly for such a consummation, I do not believe it would be the worst thing that could happen, for, in proportion as our educated deaf-mutes fail to understand each other by signs, they will be forced to rely upon written language. I do not believe it is too much to affirm *that the reckless use and imperfect command of the sign-language has done a thousand-fold more to mar its integrity and destroy its force and beauty than the use of it methodically has ever done.*

In conclusion, the American Asylum occupies such a position, by reason of her age and as "the mother of us all," that any declaration of the methods of instruction coming from her instructors is likely to carry great weight with it, and therefore I have felt that Mr. Keep's recent strictures placed our institution and our late principal in rather a false light, and demanded some correction. Yet I have derived great pleasure and profit from his articles on the sign-language. Indeed, he has written nothing that I have

not been benefited by perusing. His exposition of the genius and structure of the sign-language is certainly very masterly, and well calculated to be of great benefit to the younger members of the profession.

“TEXT-BOOKS” AND “MUTISMS.”*

BY JOHN R. BURNET, M. A., NEW YORK.

It is very true, and probably ever will remain true, that the teacher of the deaf and dumb does “not accomplish all he might desire,” unless he limits his desires to his ability; and still less “all that might be expected of him.” All of us, however, feel that it is possible to do better than we have done; and any discussion is interesting that promises to disclose the “obstacles” that “lie in the way of the greatest success.”

When we find enumerated among these obstacles the text-books which for a quarter of a century have been used in most of the American schools for deaf-mutes, and which, by the fact of such general use, are admitted to be the best produced during more than half a century by the many able teachers who have devoted much time and thought to the preparation of lessons suitable to begin the instruction of a class of deaf-mutes, we are naturally startled. But, great as is our respect for the venerable author of the text-books in question, we do not wish any teacher to take their merits upon trust. Let every objection made to them be fully and fairly investigated.

I have never yet met a teacher of deaf-mutes who maintained that “the *ultimatum* has been reached, or that *finis* has been appended to all text-books, without chance of addenda, supplement, or errata.” In the very paper cited as the subject of the article before us, the venerable author of the text-books specially aimed at observes: “The text-books now in use may doubtless be improved; somewhat,

* “A Few Words on Text-Books, etc.,” by William H. Latham, M. A. (*Annals*, vol. xvii, page 47.)

probably, in the order in which the difficulties of language are introduced; a good deal, certainly, by the introduction of new illustrative sentences.” And his able and accomplished son, in the second paper cited, proposes several changes in the order of the Elementary Lessons. The truisms cited above are, therefore, manifestly a mere beating of the air.

Advancing a few pages, we find that, in the view of the writer of the article, “the principal defects” of Dr. Peet’s books “were *verbiage*, or a plethora of words, unimportant phrases, and formulas; that their arrangement was illogical and arbitrary; and that their use—even their proper use—was calculated to engender and foster idioms and mutisms.”

The charge of *verbiage* it is hardly worth while to discuss. It is a mere matter of opinion, on which every teacher will decide for himself. If the teacher finds anything which he judges to be *unimportant*—which I, for one, do not—he will pass it over, or touch lightly on it. The charge of illogical arrangement seems to me to be particularly inappropriate, and I suspect the writer who makes it has notions on the subject of logical arrangement peculiar to himself. On such accusations as these I am content to oppose opinion to opinion, and let teachers judge.

The third charge, that the use—even the *proper use*—of Dr. Peet’s books is calculated to engender and foster idioms and mutisms, (the “idioms,” I suppose, are of course deaf and dumb idioms,) seems to me as absurd as would be the charge that reading the Bible “fosters” immorality. Every one must have observed that many of those who read that book become immoral—that all are sinners, more or less, and that there is from generation to generation a repetition of much the same sins. We are, however, wise enough to know that those who read the Bible are sinners because they are human, and not in consequence of, but in spite of, the inculcations of that holy volume. The deaf and dumb write with “idioms and mutisms” much the same, whatever text-book is used, because they are deaf and dumb.

The writer of the article before us proposes to make “the

starting point of the process" of instructing deaf-mutes a simple sentence, *e. g.*: "A cat catches a mouse;" "A cat lick milk." Will it surprise him to hear that the same or nearly the same idea has been more than once broached and carried into practice by eminent teachers?

More than fifty years ago a distinguished French teacher, the Abbé Chazottes, of Toulouse, formed the theory that all words should be taught in complete sentences. There is an outline of his theory, with copious specimens of his lessons, in the Fourth Paris Circular.* His views were embraced by other French teachers. When Dr. Peet and his son visited Paris, about twenty years ago, they found that three of the professors of that celebrated institution—one of whom had been a pupil of Chazottes—used in their early lessons either a series of sentences, like those proposed by Chazottes, or other series more like those of the Indiana teacher.† One, for example, introduces the name of every object in such phrases as: "Bring a book;" "Bring a slate;" "Show a house;" "Show a horse;" "Lift a stool;" "Kick a ball," etc. Another in such phrases as: "I see a horse;" "I see a lion;" "He sees a bird," etc.; while a third, in search of rigorous logical simplicity, begins with a series of such directions as: "Henry, stand;" "Henry, sit;" "Louis, kick;" "Philip, laugh;" "George, run."

This last, by the way, was the beginning proposed by Professor Valade-Gabel, in a book designed to enable teachers of common schools to educate the deaf-mute children found in their vicinity. The plan was zealously tried, but proved a mere waste of time and effort;‡ and though where these methods of instruction are practised by able teachers, in regular institutions, the results have been respectable, it was never claimed for them that the pupils thus taught were not as liable to write with "mutisms" as deaf-

* Quatrième Circulaire de l'Institut Royal des Sourds-Muets de Paris. 1836. (See page 149 and on.)

† See the Thirty-third New York Report, page 106, and its Appendix, page 274.

‡ See the Forty-sixth Report of the New York Institution, pages 49, 50.

deaf-mutes, under equally good teachers, who used the methods that begin with names of familiar objects and pass to qualities and actions, like, for instance, the published lessons of Bébien; of the able British teachers, Watson, Baker, and Anderson, and of Dr. Peet.

It is a fact, remembered probably by few, that a plan closely resembling that proposed in the article before us was tried in the New York Institution nearly forty years ago. After the pupils had learned to write eighteen or twenty names of familiar objects, the teacher introduced his class at once to complete sentences, *e. g.*: “Cat eats meat;” illustrated by a cat nibbling a plate of meat before the eyes of the class.† The present writer watched this process, and rather admired it at the time. He can testify that the pupils thus instructed made very fair progress whenever the lessons were put in practice by an able and zealous teacher. But he also knows that still greater progress was made by classes—whose advances he had afterwards opportunity to observe—taught strictly according to the order of Dr. Peet’s Elementary Lessons. And the liability to “idioms and mutisms” was at least as great with the pupils taught on the former method as on the latter.

The peculiar “idioms” or errors into which deaf-mutes are so apt to fall, under whatever system instructed, are owing partly to the universal habits of thought among the deaf and dumb, which, as every teacher knows, differ widely from the habits of thought among those who hear and speak; partly to the difficulty of remembering the order of words, when their succession is to be traced only by the eye and fingers and not by the ear; partly to an inability to perceive the nicer shades of meaning marked by grammatical forms and particles, to which there is nothing corresponding in their own language of signs. The effect is that every born deaf-mute, whose instruction is imperfect, writes our language with as many “idioms” as a native African or Chi-

† See the Sixteenth New York Report.

naman.* If his instruction is left imperfect, he will probably settle into a dialect as peculiar as the “Pigeon-English” of Hong-Kong. Patient instruction, skilful illustration, endless iteration, and long practice, will bring either the deaf-mute or the Chinese youth, of good capacity, to use correct English. The teacher who, using Dr. Peet’s books, does not succeed to the full measure of his wishes, is advised to try the effect of greater diligence—more frequent and constant repetition of words and sentences, especially in matters of living, daily interest, and the cultivation of a taste for reading. If he chooses to follow a method of his own, we would not discourage him, for when a teacher is discontented with the success of his efforts he may, very possibly, get up an enthusiasm for a method of his own devising, which, by promoting his zeal and diligence, may make his own success greater than by even a better method devised by others. But those who wish to know by what method a class of deaf-

* The following letter of a Chinese convert in California, taken from the *American Missionary*, affords a good illustration of the resemblance which the style of a Chinaman who is acquiring the English language bears to that of a deaf-mute engaged in the same laborious undertaking:

SAN FRANCISCO, Dec. 4, 1871.

I will try to give you a small description during the past month. Chung Moy who is in the third congregation school, he has given his whole heart to rely upon our wonderful Redeemer who has love us and gave his life for us.

He also prepare himself to join with us, but his companion rather have him wait for them to learn more knowledge of Christ.

A few evenings ago I spoke the 7th chapter 7th verse of Matthew. Ask and it shall be given you. Suppose a child fainted for food or starving for clothes, he would make a request to his parent for comfort, would they give what he ask, I should say they are willing to do as much as they can for their own child, but if he ask for a dagger or pistol they refuse him because it may do him a great harm for using such instrument. Or if a person ask his friend to lend him a hundred dollars for some important business with his laughing face toward his companion do you suppose his friend will give what he ask, No, because his complexion shew that his is not necessary to have what he request for he was only a fun, but if he ask in earnestly also show him the reason, he will success by getting it. So the Lord will give whatsoever we ask if we only trust him and do our duty as had commanded us and ask him with a right heart as the child did to his parent for comfort he will never refuse us.

Many other ways which I have spoken unto them but it would take up too much room to describe them all.

Our school at the Oakland city is increase the number from thirty to thirty-five. I have to come to an end, with my kind regard to you.

Your truly friend,

G. GAM.

mutés, under an enthusiastic teacher, has actually made the most rapid advances, may safely adopt the general plan of Dr. Peet's Elementary Lessons.

REPORTS OF AMERICAN INSTITUTIONS FOR THE DEAF AND DUMB.

BY THE EDITOR.

IN preparing this review we have taken all the institution reports that have been sent to the editor, and all, so far as we can learn, that have been sent to the Deaf-Mute College or the Columbia Institution. We would suggest to the principals of our institutions that in future they would promote the convenience of the editor, and make sure of his receiving all the reports, by sending two copies of each directly to him. The reports of this year that have not yet arrived and may come to hand hereafter we shall endeavor to notice in a future number of the *Annals*. In this article the reports are taken up in the order of the establishment of the institutions. Our aim, in each case, is to refer to those topics likely to be of general interest, making extracts when it seems desirable.

In the *Pennsylvania Institution* no change has been made in the corps of instruction, except the addition of one new teacher, Mr. A. L. Pettengill.

From the report of the directors we learn that an effort was made last year to ascertain the number of deaf-mutes in Philadelphia between the ages of six and twelve years, with the view of establishing a day-school, if it should seem advisable. Although the press of the city called attention to the subject, and requested the parents of such children to communicate with the directors, only four responses were received. Yet "there must be at least from eighty to one hundred deaf-mute children in Philadelphia between the ages of six and twelve years."

The report of the principal contains some interesting statistics and deductions therefrom; we quote a part of those relating to the sixty-seven new pupils admitted last year:

CAUSES OF DEAFNESS.	Males.	Females.	AGE WHEN DEAFNESS OCCURRED.							Totals.
			Congenital.	Under 1 year.	1 to 3 years.	3 to 5 years.	5 to 7 years.	7 to 9 years.	Unknown.	
Congenital	12	15	27							27
Scarlet fever	3	9		1	3	6	1	1		14
Spotted fever	3	3			2	3		1		6
Typhoid fever.	1	1				2				2
Black fever.		1				1				1
Measles		1				1				1
Disease of brain or ears	2	2			2	1		1		4
Whooping-cough	1				1					1
Blow on head or a fall. .	3				2	1				3
Croup.	1								1	1
Stung by a bee	1				1					1
Shot with a shot-gun. . .	1						1			1
Sickness	2	1			2	1				3
Unknown		2			2					2
Totals.	32	35	27	1	17	16	2	3	1	67

"Of the sixty-five families from which the sixty-seven pupils received during the year came, seventeen contain each more than one deaf-mute child. Eleven families contain each two; two families, each three; and three families contain each four deaf-mute children.

"In two cases the parents are first cousins; in three cases, second cousins. In one of the families where the parents are first cousins, and where there are two deaf-mute children, three uncles and two aunts on the father's side are deaf and dumb. In another family where the parents are not related, and where there are two mute children, two of the father's cousins are deaf and dumb; in still another, where there is no relationship between the parents, and where three of the children are deaf mutes, an uncle of the mother is deaf and dumb. In one family where the parents are second cousins, there are thirteen children: the two eldest (boys) and the two youngest (girls) are mutes. In one family where the parents are first cousins, one child is deaf and dumb, and three first cousins of the parents are mutes. In one case, both of the parents and a brother of the father are congenital mutes. Three of the children in this family are deaf and dumb. * * *

"The disproportion in the numbers of the sexes formerly noticeable has been greatly reduced. The number of boys and of girls now in the institution is nearly equal, there being but five more of the former than of the latter. Last year the number of each sex admitted was the same; this year the females preponderate. This accounts for the larger number of pupils we have been able to receive this year. Heretofore the boy's side of the house has been full, while much room remained on

the other side. The reason for the increased number of applications for the admission of girls is matter of conjecture, nothing being positively known on the subject."

Mr. Foster calls attention to the fact that twenty-one of the sixty-six counties of Pennsylvania, including some of the largest and most populous in the State, are not represented in the institution. *There are three counties, with an aggregate population of 150,000, that do not furnish a single pupil!* "Either the parents of deaf-mute children in those localities do not know that there is such an institution as this in the State, or they are ignorant of its provisions and of the steps necessary to be taken in order to have their children admitted, or they are unable or unwilling to incur the expense and trouble of bringing them such a distance; or, finally, they do not understand the great importance of education to the deaf and dumb."

Last year the experiment of teaching articulation in separate classes was begun, sixty or seventy pupils being selected for trial. The number was afterwards reduced to twenty-five, as there was but one teacher, and the benefit received in a majority of cases was not sufficient to compensate for the loss occasioned by absence from regular classes. "The success thus far has been sufficiently encouraging to lead to the recommendation that this be made a permanent feature in the schools of the institution."

The changes in the *Kentucky Institution* have been the retirement of Miss Martha A. Stevens, and the appointment of Mr. Jas. G. George, a semi-mute graduate of the institution, and for some years past a teacher in the Missouri Institution.

The commissioners say in their report that *scarcely more than half* of the deaf-mutes of the State who are of suitable age are in the institution. "In the great majority of cases the fault lies wholly with the parents and friends." Certainly the most active and vigorous measures are called for to remedy this lamentable state of affairs existing in Kentucky and Pennsylvania, and to a greater or less extent in other States. Sending circulars to postmasters, tax-collectors, clergymen, school-teachers, etc., is productive of some

benefit, but fails to meet the necessities of the case. More effectual is the plan which Mr. Jacobs proposes to adopt, of canvassing the State with a few of his pupils, and giving public exhibitions. But until the education of the deaf and dumb is made *compulsory* in every State, there will always remain some persons of this class to grow up in ignorance, and be a curse to themselves and the community. We are glad to observe among the instructors and other officers of our institutions a growing inclination toward the principle of *compulsory education for the deaf and dumb*, so ably advocated by Mr. Noyes at the Indianapolis convention. We hope the time is not distant when this principle will be universally recognised and adopted.

We quote the following statistics of the ninety-eight pupils of the institution:

Totally deaf	53	Inflammation of the brain.....	6
Hear more or less.....	40	Cholera infantum	1
Not ascertained.....	5	Spotted fever.....	5
Congenitally deaf.....	43	Ear-ache.....	1
Cause of deafness unknown	2	Scrofula.....	2
Deafness caused by disease.....	53	Use of quinine.....	2
As follows:		Diphtheria.....	1
Scarlet fever.....	14	Eating jimson seed.....	1
Risings in the head and ears.....	6	Congestive chills.....	1
Cold.....	3	Hydrocephalus.....	1
Fever	4	Typhoid fever.....	1
Whooping-cough.....	2	Unknown.....	2

The *Ohio Institution* has lost one teacher, Miss Lathrop, the teacher of articulation, who has become a teacher in the New York Institution; and has four new teachers: Miss Mary L. Brundige, who teaches articulation; Miss Jennie A. Shrom, Miss Ruth E. Hare, and Mrs. Adaline T. Evans. The last two are graduates of the institution. "Twelve ladies are now employed as teachers; and without detracting from the merits of our excellent corps of male teachers, eight in number, and needed in the older classes of the school, it is but justice to the ladies to say that they are proving themselves every way equal to the duties of their position."

The report of the principal gives the following description of the peculiar system by which the pupils of the Ohio institution receive instruction in the school-rooms and the shops in rotation:

"It was entered upon three years ago in order to avoid, if possible, two evils, before inherent in the trade department of

all large asylums. During school-hours, from nine o'clock to four, or from eight to one, as the case may be, the shops are, as the department is usually organized, necessarily empty, and the masters unemployed, unless they busy themselves in preparing work, as the saying is. Again, all necessarily go to the shops together, before or after school, or at both times, and, supposing three trades to be taught, as is the case with us, the boys, when two hundred in number, the number we actually have, would average over sixty to a shop. No master can give suitable attention to sixty apprentices at one time, however diligently he may prepare for it, or be sure that they are all of them even at work. A shop, if possible, should have its operations prolonged through an ordinary working day, and, in a large institution at least, should receive its complement of pupils, in successive sets, through the day. To secure these ends without detriment to the schools the following system has been pursued :

“The school is divided into three divisions, consisting at present of six, six, and seven classes. The day is also divided into three sessions, of two, two, and three hours, the first extending from half-past seven to half-past nine, the second from half-past ten to half-past twelve, and the third from two to five, with half an hour's recess at half-past three. At half-past seven the regular duties of the day begin. Two divisions go to their respective class-rooms, and the third is distributed, the boys to the trades, and the girls to the bindery and the housework. All are dismissed at half-past nine. At half-past ten, after the chapel service, two divisions go to their class-rooms and one is distributed as before, the boys to the shops and the girls to the bindery and the housework. All are dismissed at half-past twelve, the hour of dinner. At two o'clock, as before, two divisions go to school, and the third to the trades and the housework. All are dismissed at five. Thus in working hours, from half-past seven in the morning until five in the afternoon, two-thirds of the school are at school and one-third is at work. Every pupil attends school two sessions daily, and works one session. The average daily time spent at school is something less than five hours, and that spent in manual labor is about two hours and a half. To secure a fair distribution of time, and also a desirable variety, the whole system moves forward one session the first day of every month, so that those who work in the morning any month work the next month in the forenoon, and in the afternoon the month after that. Those who work in the forenoon any month work in the afternoon the next, and those who work in the afternoon any month work in the morning the next.

“This rotation is so generally understood by the pupils that, upon the first day of each month, the change to occur has only to be announced without explanation, and all go to their appropriate departments without confusion. The evils mentioned at the opening of this section have ceased to exist, and a system of adjusted study and labor has been reduced to practice,

which, it is hoped, will, in the history of the institution, prove to be highly beneficial."

Mr. Fay knows of 182 uneducated deaf-mutes in the State of Ohio, between the ages of ten and twenty, who are not at school.

The report contains various statistics of interest and value with regard to the pupils now and formerly in the institution. The alleged causes of deafness of the 1,252 pupils who have been received since the beginning of the institution are as follows:

Causes.	No.	Causes.	No.
Not reported.....	39	Teething.....	9
Reported unknown.....	96	Rickets.....	5
Congenital.....	423	Erysipelas.....	5
Scarlet fever.....	129	Scrofula.....	5
Brain fever.....	71	Quinine.....	4
Spotted fever.....	38	Small-pox.....	3
Typhoid fever.....	23	Paralysis.....	3
Bilious fever.....	4	Diphtheria.....	4
Congestive fever.....	2	Ague.....	3
Typhus fever.....	2	Croup.....	3
Lung fever.....	3	Mumps.....	3
Yellow fever.....	1	White swelling.....	2
Catarrhal fever.....	1	Chicken-pox.....	3
Fever.....	46	Worms.....	2
Sickness.....	99	Dysentery.....	2
Sores in head.....	73	Neuralgia.....	1
Measles.....	40	Rheumatism.....	1
Cold.....	32	Bronchitis.....	1
Fits.....	19	Calomel.....	1
Whooping-cough.....	21	Cruelty.....	1
Accidents.....	18	Gout.....	1
Hydrocephalus.....	8	Swimming.....	1

The alleged age when deafness occurred in these 1,252 cases is as follows:

Age not reported.....	242
Congenital.....	423
Under 1 year.....	185
Over 1 year and under 2 years.....	167
" 2 " 3 ".....	73
" 3 " 4 ".....	48
" 4 " 5 ".....	34
" 5 " 6 ".....	19
" 6 " 7 ".....	13
" 7 " 8 ".....	20
" 8 " 9 ".....	9
" 9 " 10 ".....	3
" 10 " 11 ".....	2
" 11 " 12 ".....	4

Over 12 years and under 13 years.....	2
“ 13 “ 14 “	2
“ 14 “ 15 “	1
“ 15 “ 16 “	1
“ 16 “ 17 “	1
“ 17 “ 18 “	1

The following table shows the length of schooling of the pupils who have been discharged since the beginning of the institution :

When discharged.		1st year.	2d year.	3d year.	4th year.	5th year.	6th year.	7th year.	8th year.	9th year.	10th year.	Average length of schooling.
3 yrs the legal limit, 1830..	2	...	...	...	...	...	...	...	...	...	...	1
“ “ 1831..	5	...	...	...	...	...	...	...	...	...	...	1
“ “ 1832..	1	...	1	...	...	...	...	...	...	...	...	2
“ “ 1833..	3	2	1	1	...	...	...	...	...	...	...	2
“ “ 1834..	1	...	1	2	...	...	...	...	...	...	...	3
5 “ “ 1835..	4	3	1	5	4	...	...	...	...	...	...	3.12
“ “ 1836..	2	2	1	...	2	1	...	...	...	...	...	3.12
“ “ 1837..	6	1	1	3	2	...	...	...	...	...	...	2.54
“ “ 1838..	4	1	3	6	...	...	...	...	...	...	...	3.21
“ “ 1839..	6	...	3	7	5	...	1	...	...	...	...	3.45
“ “ 1840..	4	4	3	2	3	2	...	...	...	...	...	3.11
“ “ 1841..	9	3	2	1	3	...	1	...	...	...	...	2.47
“ “ 1842..	2	2	...	...	3	3	...	...	...	...	...	3.30
“ “ 1843..	3	3	1	3	5	...	...	...	...	...	...	2.60
“ “ 1844..	4	2	2	2	4	1	...	...	...	...	...	3.20
7 “ “ 1845..	6	1	2	1	6	1	6	1	...	...	...	4.08
“ “ 1846..	4	3	1	1	4	3	4	...	1	1	...	4.63
“ “ 1847..	5	2	3	1	4	6	1	...	...	...	...	3.86
“ “ 1848..	5	3	4	2	9	2	2	1	1	...	...	4.10
“ “ 1849..	6	2	1	1	2	2	1	...	...	...	...	3.06
“ “ 1850..	3	5	8	5	5	3	4	...	...	...	...	3.83
“ “ 1851..	3	3	3	5	4	2	5	...	...	...	...	4.20
“ “ 1852..	6	2	3	6	2	3	3	...	...	...	...	3.52
“ “ 1853..	3	2	1	2	3	5	5	1	...	...	...	4.82
“ “ 1854..	3	1	2	...	6	5	7	...	...	...	...	5
“ “ 1855..	1	3	1	4	5	2	7	2	...	...	...	5.12
“ “ 1856..	1	1	3	4	10	2	1	...	...	...	...	4.32
“ “ 1857..	4	3	1	5	7	4	9	...	...	...	...	4.69
“ “ 1858..	...	2	6	2	8	3	15	...	...	...	...	5.36
“ “ 1859..	1	1	5	2	5	3	11	...	...	...	...	5.21
“ “ 1860..	1	1	2	6	10	2	13	...	1	...	...	5.42
“ “ 1861..	3	1	...	8	13	2	8	2	...	...	...	4.76
“ “ 1862..	2	3	2	2	8	1	5	...	...	...	...	4.48
“ “ 1863..	2	3	1	2	5	3	3	...	...	...	...	4.35
“ “ 1864..	...	4	2	3	12	5	12	...	...	...	...	5.26
“ “ 1865..	3	2	4	3	11	5	9	...	...	...	...	4.83
10 “ “ 1866..	3	2	1	3	6	1	10	...	...	...	...	4.96
“ “ 1867..	1	4	9	2	5	3	1	...	...	...	...	3.72
“ “ 1868..	1	2	...	...	1	...	...	...	...	...	...	2.50
“ “ 1869..	10	2	2	1	2	3	5	1	...	...	...	3.65
“ “ 1870..	7	6	2	1	2	3	2	...	...	...	...	2.96
“ “ 1871..	5	1	9	5	2	...	9	1	2	...	...	4.50

"It appears that from 1830 to 1834, when three years was the legal limit, out of 20 discharged, only 6, or 30 per cent., reached the limit established by law; that in the period 1835-44, when the legal limit was five years, out of 151 discharged, only 46, or 31 per cent., reached the legal limit; that in the period 1844-65, when seven years was the limit, out of 575 discharged, only 142, or 25 per cent., reached the limit; and that for the period 1866-71, during which ten years have been possible, not a single pupil has remained at school that length of time. From year to year the school age of educated mutes, so called, has been far below the time allowed. There has been but little disposition to linger at the institution. On the other hand, pupils and their friends have usually been in haste to return again to the ordinary associations and business of life—too frequently before the merest rudiments of a common education have been gained. Because a pupil can place a few words and sentences upon a page neatly, it is too often assumed that he is already well advanced in an acquaintance with written speech—an illusion which his subsequent efforts to carry on the ordinary conversational intercourse of life and business quickly dispels. It is to be hoped that the pupils who are now at school, and their friends, will regard their interests sufficiently to be induced to avail themselves more fully, and for a longer period, of the facilities for education gratuitously extended to them by the State."

The *Virginia Institution* has changed its principal; Mr. Covell, who was removed by the board of visitors, has been succeeded by Mr. Charles D. McCoy, formerly a teacher in the blind department of the institution. The high class, established the year before, with Mr. Wm. L. Bird as its teacher, has been discontinued, and Mr. Bird has become an instructor in the American Asylum. The report is chiefly devoted to matters of local interest.

In the *Indiana Institution*, Mr. Eugene W. Wood has retired from the corps of instructors, being succeeded by Miss Isabella Gillet, a hearing lady. Miss S. J. Crabbs, a member of the senior grade of the high class, is temporarily engaged as a teacher.

It is an interesting fact, that five members of the first board of trustees of this institution are still living, and that among them are Bishop Simpson and Henry Ward Beecher.

Mr. MacIntire, in his report, urges that the age for the admission of pupils, except in extreme cases, should not be less than ten years.

"To lessen the age of admission," he says, "would necessitate the extension of the course of study, or the abandonment, in a great degree, of the idea of teaching the pupils trades. If applicants should be received at eight years of age, instead of ten, and the time of instruction, now ordinarily six or seven years, be extended to eight or nine, the aggregate number of pupils would be increased in the same proportion, and a corresponding increase of accommodations and the annual allowance for current support would be required. On the other hand, should pupils be admitted at seven or eight years of age, and the term of study remain as it is at present, pupils would have to be discharged at an age when they would most need and would be most benefited by the instruction and discipline of the institution, and without the opportunity of learning a trade, or acquiring those habits of industry so necessary for self-support and usefulness in after life."

[Mr. MacIntire here illustrates the first of these points by the experience of the New York Institution, where the number of pupils, and in consequence the current expenses, have been very much increased since "county pupils" have been admitted between the ages of six and twelve. He continues:]

"It is a fact, that some parents are more willing to part with their deaf-mute children, and send them to the institution, from seven to twelve years of age, than they are when they become older. This is owing, in part at least, to the fact that they feel, at this tender age, more sensibly the crushing weight of the misfortune that has fallen upon them, the difficulty of communicating with them, and the necessity of some means of relief. But as the children grow older, they are better able to take care of themselves, the parents learn to converse with them concerning matters at home, and find them useful, and consequently become less and less inclined to part with them. Another reason is, that, when they begin to send their speaking and hearing children to school, the contrast is so marked between them and their deaf-mute children, they feel that they would make any sacrifices to relieve the mental darkness of the latter, and place them on an equality with their other children; but gradually they become more accustomed to their ways, and less affected with their misfortune, and less deeply impressed with the necessity of having them educated.

"It is natural that parents should desire to place their deaf-mute children under instruction at as early an age as possible, prevented, as they are, by the peculiar difficulties of the case, from instructing them themselves, or from having it done in the common schools. Seeing that hearing and speaking children begin to go to school at from five to seven years of age, they would have their deaf and dumb sons and daughters begin thus early too. To such I would say, the cases are not parallel. A deaf-mute child of ten years of age is ordinarily, in mental, and not unfrequently in physical, development, not above the average

speaking and hearing child of seven. Besides, hearing children are not separated from home and friends, as the deaf and dumb necessarily are, but are kept under those benign influences during the whole of this tender age. However perfect may be the organization of a State institution, it cannot entirely supply the place of home, nor its matron or nurse the place of mother. Children from seven to ten require a very different regimen than those from ten to eighteen, and much more personal attention than can possibly be devoted to them in an institution that has not a separate and distinct department organized for such. We have no such department, and experience here, as well as elsewhere, has fully shown that it is, in nine cases out of ten, a detriment, instead of a benefit, to bring such under rules and regulations, and a discipline such as is required in the case of those older.

“It is not, therefore, advisable to change the rule in respect to the age at which children can be received as pupils into the institution. The only exceptions that ought to be made are those in favor of deaf and dumb children who are county charges, or destitute of the proper protection.”

The arrangement of school-hours and manual labor in the Indiana Institution is described as follows :

“Formerly, the pupils worked an hour and a half before school in the morning, and the same length of time after its close in the evening. Much of the time was taken up in going to and in getting ready for work, and in coming from the shops, washing, changing clothes, and in preparing for school. Often, by the time they had collected their tools and materials ready to use, they would have to leave. Their time, indeed, was too much broken up into fragments, and their attention distracted by a too frequent change from one thing to another.

“Two years ago a change was made which has, in every way, proved advantageous. The business hours of the day are divided into two principal parts, the one for study and the other for labor. The hours from a quarter before eight in the morning to one P. M. are, with the exception of a recess of fifteen minutes, devoted uninterruptedly to the duties of the school, and from two to five to the employments of the shops. It is found, in practice, that more concentration of attention, more interest, greater effort, and more rapid improvement can in this way be secured. Nor in either department is it found that the effort put forth is so prolonged as to become wearisome.

“The five hours spent in the exercises of the school-room, and the hour and a half devoted to study in the evening, under the supervision of a teacher, is as much time daily as the pupils can profitably employ in mental effort. And the three hours a day spent continuously at work in the shops is more profitable to the pupils than four hours would be, divided up into intervals

of an hour or an hour and a half each. The pupils like the arrangement much better than the old plan, work better, learn faster, and accomplish more."

Mr. MacIntire recommends that printing and book-binding be added to the trades taught, experience having shown that these occupations are peculiarly suited to the capabilities of deaf-mutes.

The report of the *North Carolina Institution* is chiefly devoted to matters of local interest. It is urged that the building occupied by the colored pupils, which is at a distance from the white department, and is now rented at a low rate from the American Missionary Association, be purchased by the institution. The provision for the education of the colored deaf and dumb and blind in North Carolina seems to be successful in its results.

At the beginning of the present session a class in articulation and lip-reading, composed of twenty-five deaf-mutes and semi-mutes, was organized. This class is taught outside of the regular hours for study and recitation, from one to two hours daily, in the afternoon, being devoted to the work. We infer that the instruction is given by Mr. Tomlinson, the principal. He says that, though a novice at the work, he has reason to feel gratified at the results of his efforts.

In the *Illinois Institution* there have been three changes; Miss Elvira P. Gage, Miss Anna B. Osgood, and Miss Belle E. Woods being succeeded by Miss Annie Morse, formerly a teacher in the Minnesota Institution, Miss Elizabeth M. Locke, and Miss Helen M. Dunning, a graduate of the New York Institution.

Several pages of the report of the directors and of the principal have reference to the new wing of the institution, now occupied. As its arrangement "contemplates a different principle of organization from that which has thus far been obtained in the large institutions for the deaf and dumb," we quote from Mr. Gillett's report a brief description of it:

"The large dormitories and study halls are dispensed with, and

the system of monitorial service, partaking of the nature of espionage, is discarded. Instead, the young ladies are to occupy dormitories intended only for a few persons, and a smaller number are to be aggregated for study. In some cases private rooms are designed for this use. This will admit of a congenial classification, relative to social relations; will place the young ladies upon their personal responsibility as to behavior, application, *et cetera*, and will in every way, I believe, tend to cultivate among them sentiments of refinement much more effectually than we have heretofore been able to do. The first story of the house is designed for small girls, the second for those of intermediate grade, and the third story for the young ladies most advanced. Upon each of these stories are rooms set apart for the use of lady teachers and matrons. Adjacent to the dormitories of the small girls is a room to be occupied by one of the matrons, to whom they can have access at all hours of the day and night.

"The basement contains a large gymnasium or play-room, where these little ones can give full exercise to their vivacity and restlessness without any breach of decorum. I hope to make that a paradise for little children. Dolls and play-houses for the smallest, swings and frolicking for the intermediate, and appropriate amusements for the oldest, will at proper hours be in order here. It is hoped that this will prove the best of *sanitaria*, in that it is based upon the principle of an ounce of preventive surpassing in value a pound of cure.

"Should the change of organization which we are about to test with our female pupils prove productive of the results expected, I hope to see ere long a modification of the internal structure of the boys' apartments, so that the same system can be inaugurated with them."

Mr. Gillett urges the speedy erection of school and chapel buildings, "that the jumble of domestic and intellectual departments may be as soon as possible terminated." When these buildings are completed the institution will have comfortable accommodations for three hundred and twenty pupils, which Mr. Gillett regards as the number best combining economy and efficiency.

The *Georgia Institution* has lost the services of Mr. James S. Davis. Miss S. J. Posie takes his class.

The principal, in his report, deprecates the appointment of inexperienced teachers to young classes, and urges the importance of paying teachers reasonable compensation for their services. He advocates the teaching of articulation to the extent recommended by the Washington conference of principals.

A singular "objection that has been made to the instruction given in the institution" is noted by Mr. Connor, viz: "that the pupils are taught to consider themselves as men and women—intellectual beings, entitled to the same respect and consideration as those who are more fortunate." We are pleased to see that Mr. Connor and his colleagues purpose continuing this same kind of instruction, and that they can point to pupils and graduates who have profited by it. The latter "have gone out into the world as men and women, and are earning honorable livings for themselves, in many instances for families, and, in a few, supporting by their labor aged parents."

A large part of the report of the *Louisiana Institution* is devoted to a discussion of the attempt to deprive the institution of its building, and to make the present temporary occupancy of it by the State University permanent. This attempt the principal earnestly opposes, while the directors propose, as a compromise, that a new wing be added to the building, thus making it large enough to accommodate both institutions. But even if sufficient space were provided in this way, the inconveniences of having two separate establishments, differing so much in their purposes and methods, upon the same grounds, and more or less under the same roof, must be very great, and we hope Mr. McWhorter's zealous defence of the prior rights of the deaf and dumb will result in the retention of the building for the purposes for which it was erected.

Mr. McWhorter gives the following epitome of the aims and methods of deaf-mute instruction, and of the system which he believes to be the best:

"The course of education, as has already been remarked, is closely confined to the acquisition of language as the end in view; but this is not inconsistent with considerable attention being paid to the common principles of art and the sciences, to general intelligence and simple literature. Indeed, the sciences soon become to the pupils the broadest field for discipline in language, furnishing aliment and interest to the mind wearying of monotony, and a store of energizing forces to the teacher. Penmanship has early and frequent attention, for a good handwriting is an accomplishment that, to the mute, has a peculiar

fitness and value. Geography and practical arithmetic are mastered as thoroughly as in our common schools. Grammar as generally taught and learned, contrary to a very natural supposition, has little place or practical value in our course, being very rarely used as a text-book. The usual errors of the deaf and dumb as respects the grammatical use of language are quite distinct, and of a kind totally unlike those of hearing persons. Their case, consequently, demands a special treatment, to which our text-books are not adapted. Analysis of words, and a knowledge of the force of prefixes and affixes to vary the meaning and the proper position in a sentence of a very large class of words, is of much more consequence than grammar as generally taught. History, probably, fills a larger portion of the course than does any other science, for the simple reason that it furnishes a wider field for appropriate lessons in the study of language and more interesting topics for its practical use. Physical geography, physiology, natural philosophy, astronomy, and somewhat of chemistry, have, very properly, their places in our course of instruction so far as the limited period of time allotted and the capacity of the pupil will permit. In some institutions, instruction is given in drawing to such as have a peculiar talent to profit by it. Instruction in articulation and lip-reading, as an art rather than as a means of imparting knowledge, is now generally afforded to such as are likely to be benefited by it, but the number is small, not exceeding ten per cent. of the whole. Rival schools are springing up, with energy, determination, and the requisite means to test the value of this art and its true position in educating the deaf and dumb, and we may expect soon a more settled opinion prevailing respecting this matter, so perplexing to many anxious parents. The subject was more elaborately discussed in my last report, and nothing has since come to my knowledge that legitimately affects the views then expressed. There are five among our pupils who can doubtless receive great benefit from proper instruction and practice in articulation and lip-reading. *Finally, and emphatically, I believe that, as to means and methods in educating the deaf and dumb, written conversation is incomparably the best.*

The proper qualifications of a teacher of the deaf and dumb are discussed. After speaking of the great importance of this subject, "the possibilities of good being so great and danger of disaster so imminent," Mr. McWhorter continues:

"The prime qualification is quickness to perceive the real condition and wants of his pupil at any time, and tact to meet them. It is a compound of talent, experience, and education. Not a little instruction is given in an aimless, unsystematic way, the teacher being neither certain of the precise want of the

pupil nor methodical in supplying a supposed want. It is not altogether easy to draw out properly a recitation in our common schools, and for a teacher to avail himself of wise and fully-defined systems of instruction afforded by more experienced teachers; it is much more difficult, as is necessary in the case of instructing deaf-mutes, to be text-book as well as teacher; to be thrown on his own resources in an almost trackless wilderness of difficulties, his common sense generally his only map and compass, and then advance safely, directly, and rapidly. Peculiar talent is needed to grasp the elements of success; to scrutinize the minds of his pupils in order to a proper understanding of their difficulties; to be kindly appreciative of their condition; to awaken and keep alive a constantly fresh interest; to exercise their faculties with energy and success; to be systematic and thorough in unfolding and practising the principles of language without monotony; to be patient, even cheerful, under multiplied failures. He will find ample employment for the shrewdest tact and ingenuity, for all his powers of analysis, invention, classification, and illustration. None can be so able but that he will find the tax upon his resources both constant and severe.

“As a general rule, a teacher will, if devoted to his work, be valuable in proportion to his experience; next, to his talent. As in other professions, so here: it disciplines the intellect, corrects the judgment, and maps out the work to be done. He will need to make the profession his specialty: to read, study, and devise, with an enthusiastic purpose constantly bearing upon it, as directly as do the successful physician, lawyer, and divine in their respective professions. It is no sphere for a cold, unappreciative disposition, an idler, or one who only wants employment to gain a livelihood, or the means to fit himself for another sphere. It is rather the sphere of the enthusiastic worker, sure of a reward commensurate with the talent and devotion rendered.

“It is hardly necessary to add that a liberal education is advantageous at every step in a course involving a constant exercise in the principles of language, nor that it is indispensable in the latter part of the course.”

Mr. McWhorter has additional proof of the inaccuracies of the last census in the fact that of the eleven new pupils who joined the institution this year four were enumerated and seven were not.

In the *Wisconsin Institution*, Mr. George L. Weed, Jr., has succeeded Mr. Edward C. Stone as principal, and Mr. C. L. Williams, formerly of the Minnesota Institution, and Miss Mary Johnson, formerly of the New York Institution, have succeeded Mr. W. A. Cochrane and Miss Julia

Northrop as teachers. Mr. Stone is now principal of the American Asylum, and Mr. Cochrane a teacher in the Michigan Institution.

The experience of the institution in teaching articulation during the past year is described in the principal's report, as follows:

"This department of the school has been continued during the year with varied success. A few congenitally deaf, or who lost their hearing so early that it has never been of practical benefit to them, have been a pleasing illustration of what can be done by faithful and protracted labor by teacher and pupil. One section has constituted a regular class in the school, with uniform studies; and still another has been composed of members of other classes, taught by signs, but who spent a small portion of each day in the articulation-room, practising lip-reading and articulation. At present the class is in two sections, both under the charge of Miss E. Eddy; one composed of members of last year's classes, and the other of beginners. Some who were admitted into this section on representation of ability to articulate have been transferred to the new class taught by signs. It has been found that parents in some cases have been too hopeful of what might be done for their children. It should be understood that in this institute the distinction between what is called a sign class and the articulation class is in the medium of instruction; one is taught *by* signs, the other *by* articulation. The same course of study is being pursued by two such classes, giving a fair opportunity of testing the relative progress by the different methods.

"Respecting articulation itself, our experiments thus far give the following results, viz:

"1. Articulation by congenital deaf-mutes is *possible in certain cases*.

"2. Articulation by the mass of deaf-mutes is so nearly impracticable, both in its attainment and in its use, as not to come under the legitimate work of *free* deaf-mute instruction.

"3. *Semi*-mutes should receive special attention in the preservation and use of what language they have acquired, and in adding to their vocabulary."

Mr. Weed urges that the time allowed for instruction be extended, and a high class be established; also, that means be taken to make known throughout the State the existence and character of the institution. He believes this can best be accomplished by means of exhibitions in different parts of the State, and that as the institution becomes known a public opinion will be formed which, as Mr. I. L. Peet said

at the Indianapolis Convention, "will be almost a compulsory law." There are, according to the census, a hundred deaf-mutes of suitable age in Wisconsin who are not in school; and probably there are in fact many more.

The *Iowa Institution* has one new teacher, Miss Ella A. Brown, a speaking lady.

The report of the trustees describes the defects of the new building at Council Bluffs, which "is a very poor job, and reflects no credit upon the State of Iowa." The appropriation for building was too small, and the work was poorly executed. There is always some inconvenience in the occupation of a new building, but in this case the officers and pupils seem to have been subjected to an unusual degree of discomfort and annoyance.

Upon the subject of articulation, Mr. Talbot says that the experiment of teaching it in the Iowa Institution, which, if we recollect rightly, was made on a somewhat limited scale, has not been wholly satisfactory. "A part of the subjects were disinclined to make persistent and regular efforts to speak, and of course did not succeed very well. A few of the class, however, have made marked improvement in the use of their vocal organs." It is recommended that provision be made for regular teaching in this department. "While no such attention should be given to this accomplishment as would hinder any from progress in their studies, yet all should have a chance to secure whatever advantage they may in this direction."

The importance of thorough elementary work, which Mr. Talbot urges in an article in the present number of the *Annals*, is spoken of briefly in his report. He says:

"Perhaps teachers of the deaf and dumb, at the present day, fail too often of laying the foundations deep and broad enough. If they are too impatient of the elementary work, and, with ambitious desire of display, push their pupils on too fast, they do them an injury from which they may never recover. Slow and sure is the best motto for our teachers, if at the same time they keep their pupils making real progress, instead of running all the time in the same circle of language and ideas."

Mr. Talbot believes that "simplicity and efficiency of

management and the best interests of the institution imperatively demand that the married teachers, and perhaps all the instructors, should live outside of the institution. The other officers will thus be relieved of a great deal of care and anxiety, and the domestic help will be at liberty to labor more directly and entirely in the service of the institution."

The alleged causes of deafness in the thirty-six pupils admitted since the publication of the last report are as follows:

Congenital.....	4	Diphtheria	1
Inflammation of the brain...	1	Cold	1
Brain fever.....	3	Cold in the head.....	1
Spotted fever.....	4	Scrofula	2
Scarlet fever	7	Gatherings in the ears....	2
Measles.....	2	Sickness, unspecified.....	2
Small-pox	1	Medicine.....	1
Mumps.....	2	Sunstroke.....	1
Whooping-cough.....	1		

The ages at which deafness is supposed to have begun in the cases of these pupils were:

At birth	4	At five years.....	5
Under two years old.....	12	At six years.....	2
At two years and over.....	6	At seven years.....	2
At three years.....	1	At twelve years.....	1
At four years.....	3		

The *Mississippi Institution* presents its first report since its reopening. As the buildings were burned during the war, together with the reports, records, papers, and everything else pertaining to the establishment, the reopening under a changed law, with changed officers, and on a different site, is really the opening of a new institution. A private residence has been purchased, which, with some additions, has been made to afford good accommodations for about forty pupils. The present number is thirty-one. The principal is Dr. J. L. Carter, and the teachers, Mr. R. L. Saunders, a deaf-mute, and Mrs. Sarah M. James, a hearing lady.

The *Texas Institution* mentions no changes in its officers. The report is short, and chiefly devoted to matters of local interest.

The report of the *Columbia Institution* contains an account of the dedication of its main central building, which has been already published in the *Annals*. It urges the importance of additional legislation to extend the advantages of the college to deaf-mutes from the whole country in a manner that shall do no injustice to any State or section. It is estimated "that the whole number of deaf-mutes in the United States properly qualified to sustain a collegiate course of study cannot exceed two hundred at any one time during the next twenty years. The board is also of opinion that the number now in the college—viz., fifty—may be expected to rise to one hundred within the next five years."

The subject of articulation is treated as follows:

"Instruction in articulation is given to all who desire it, and are found to possess such natural aptness for correct vocalization as seems to justify the great expenditure of time and labor essential to any satisfactory progress.

"Very great natural differences exist in the ability to master the mechanical part of vocalization. And experience, thus far, only deepens the conviction, that, while a very large percentage of deaf-mutes can, with sufficient pains, be taught to articulate in a manner intelligible to friends, and many so that they can make themselves understood by strangers, yet a comparatively small number can ever acquire such perfection as that the use of speech will be a pleasure to themselves or others.

"Use has been made of the system of 'Visible Speech,' of Prof. A. M. Bell, of London, with gratifying results. It is felt that he has rendered most valuable service to this department of deaf-mute instruction."

In the *Alabama Institution*, Mrs. E. A. Johnson, formerly a teacher, has become matron, and Mr. W. S. Johnson, a deaf-mute, has been added to the corps of instructors.

Dr. Johnson submits with his report the discussion and action of the Indianapolis convention of instructors of the blind, relative to the education of the deaf and dumb and the blind in the same institution,* and says he believes the position taken by the convention to be correct. He recommends that the provision of Illinois, with reference to the clothing of indigent pupils at the expense of the counties from which they come, be adopted in Alabama.

* See *Annals*, vol. xvii, page 130.

In the *California Institution*, Mr. Amasa Pratt, who had left the service of the institution to engage in other professional labor, has returned to it.

Mr. Wilkinson, in his report, discusses the causes of the failure to send all suitable deaf-mutes to the institution, and the remedies to be adopted. As a final remedy he advocates a compulsory law. Such measures as exhibition tours, newspaper co-operation, and circular letters to postmasters—

“Will suffice for all but the selfish class of parents, but with them only the stern force of law will avail. Education of the deaf and dumb is a measure of public economy, inasmuch as it converts useless consumers into active producers of national wealth. It is also a measure of public safety, because it converts irresponsible brute force into moral force amenable to law and subject to social discipline. The law wisely regulates the storing of explosives and the traffic in poisons, and surely no parent has the moral right to allow a deaf-mute child to grow up in an ignorance that may result in crimes for which no civil court would hold him responsible. It is for this reason, as well as for considerations of humanity, that we earnestly hope and expect at no distant day a statute requiring the education of all deaf-mutes, as one of the safeguards to society which properly comes within the jurisdiction of the law-making power.”

Much of the report is devoted to local matters, especially to the reports of the examination at the close of last year, which was conducted chiefly by professors in the University of California, each acting as examiner in the branches constituting his own specialty. The results were exceedingly satisfactory. Another advantage which the institution enjoys in its proximity to the University is in receiving lectures from its professors. Of the twelve lectures on chemistry thus given last year in the chapel of the institution, Mr. Wilkinson says:

“Treating subjects of general interest by reason of their relation to art or life, delivered in easy conversations, that reminded one of Faraday’s lectures before the child audiences of the British Academy, in 1861 and 1862, and illustrated by pleasing, often brilliant, experiments, these lectures have not only imparted to our pupils a vast amount of information, but have given a stimulus to science that has found expression in all sorts of rude apparatus and ingenious devices for reproducing the professor’s experiments, till, what with old nails, copper, zinc, bottles, pipes, soapsuds, acids, and gases, the lavatories of the

institution where these researches are permitted have sometimes the appearance and odor of a chemical laboratory."

The *Minnesota Institution* reports the following changes: Mr. Cyrus L. Williams and Miss Annie Morse have left the service of the institution, the former to become a teacher in the Wisconsin Institution, and the latter in the Illinois Institution. They are succeeded by Miss Cora A. Howe, a graduate of the institution, and her sister, Miss Annie Howe, a hearing lady.

Mr. Noyes urges the importance of providing additional accommodations for the education of the ninety-three deaf-mute and blind children in the State, of a suitable age to be in school, and of making provision for teaching trades. "Mechanics will not teach a trade to those who cannot hear." The report is mainly devoted to local matters. It is an interesting fact, that in the whole history of the institution, which covers a period of nine years, there has been no death or serious accident, and but very little sickness of any kind.

The *New York Institution for Improved Instruction* has two new teachers, Miss Susan M. Jordan and Miss Charlotte M. Lathrop, both of whom had been teachers in the Clarke Institution and elsewhere.

As articulation is made the basis of instruction in this institution, those parts of the report devoted to this subject will be the most interesting to our readers. Dr. Blumenthal, president of the board of trustees, says in his report that it is a mistake to suppose the teaching of articulation is easy, or that any one can be a teacher without preparatory studies. He continues:

"The power to communicate sounds, and the ability to educe from the mute their imitation or repetition, though of the greatest importance, as laying the foundations upon which the superstructure of language is to rest, is by no means all that is required. Teachers must, in addition to this, understand the imparting of the meaning of words and the names of things, giving definite ideas of the subject-matter, and demonstrating them by drawings and plates, comparisons, contrasts, and analogies. It is not only necessary that the child should acquire words and their meaning, but also the manner of using them

correctly in speaking and writing. Hence the teacher who knows best how to impart to the pupil the various sounds of the alphabet and how best to extract from him the distinct enunciation of syllables and words, and who, in addition to this, can best bring to the comprehension of the child's mind the meaning and uses of words, their correct orthography and grammatical construction in sentences and paragraphs—such a teacher will be most successful, and produce results which, while they astound, must heartily gratify all who are truly philanthropic."

He claims that to obtain these results the entire energy of the child must be devoted to this end, and that he must, therefore, be shut off from all knowledge and use of the sign-language, as the latter, being easiest of acquirement, is made the ordinary means of communication where it is used at all; and thus interferes with that practice and interest in articulation which are essential to success. It is urged, both by him and the principal, that all the deaf-mutes of the State who are to be taught by articulation should be sent to this institution; the principal further suggests that in each of the large States where there are two hundred or more deaf-mutes of suitable school age there should be three institutions, and that the classification should be as nearly as possible as follows:

"1. Those deaf-mutes of a low grade of intellect, who, while neither idiots nor insane, are but a slight remove from one of these types, should be placed in an asylum where the simplest forms of instruction could, in time, be imparted to them, and where very especial attention should be paid to their obtaining a knowledge of some handicraft or industry. A large farm in the country would certainly be better adapted for such than city pavements. 2. The second institution should receive those mutes who, by reason of age or for other causes, cannot be advantageously instructed by articulation. The benefits accruing from the division of these two classes are important, especially in this regard, that whilst their union seems to demand an excessive use of signs, as this language of pantomime reaches the lowest order of intellect, their separation would render it possible to so discard signs and to employ the manual alphabet and writing instead, that a higher standard of education could thus be gained. 3. To the third division should be assigned all mutes who could be taught speech and lip-reading, including deaf persons who can still hear or speak a little, and all who through disuse of their vocal organs have forgotten how to speak—the semi-mutes, as they are technically termed, those who

once heard and spoke. A portion of the brightest intellects among the congenital mutes would here be found, as experience proves the ability of such to articulate distinctly."

Fifty-four of the sixty-four pupils of the institution became deaf when under three years of age; "thus far the semi-mutes, with one or two exceptions, have made no more rapid progress than the congenital mutes with whom they are classed." Mr. Rising claims for his pupils that, aside from the acquisition of articulation and lip-reading, "they become better proficient in language; they use idiomatic English with greater freedom and accuracy. This is evinced in their conversational expressions, in their letters and journals, in their phrase exercises and compositions. Freedom from inversions and deaf-mutisms results from oral recitations, and the use, in all communications between pupils and teacher, of such language as hearing persons employ." He quotes from several eminent teachers the frank confession that under the prevailing system congenital deaf-mutes do not generally acquire *a perfect mastery* of the English language, but we do not understand him to assert that any congenital deaf-mutes taught by articulation have fully accomplished this difficult task, or that *entire* "freedom from inversions and deaf-mutisms" has been reached; only that a nearer approach to it has been made. As a matter of fact this claim is not admitted by the advocates of the other method; now that the articulating institutions are beginning to have pupils who have been under instruction several years, we hope it will be possible to institute a comparison between the results of the two systems in this respect; such a comparison, if fairly and fully made, would be of great interest and value, and would go far toward the decision of several important questions, which, for the present, remain in abeyance.

Dr. Blumenthal and Mr. Rising argue against large institutions, the latter maintaining, and bringing statistics to show, that "those institutions containing in the neighborhood of two hundred inmates are the ones sustained at the least *per capita* cost, exhibiting a prudent uniformity in

expenditure, while, in compactness of organization, efficiency in administration, and greater freedom from infectious diseases, they likewise commend themselves to the man of business, and to the philanthropist."

The *Clarke Institution*, during the past year, has had a special teacher of articulation for a portion of the time, Mr. A. Graham Bell, whose recent article in the *Annals*, on "Visible Speech,"* will be remembered by our readers. At the time of the publication of the report, Mr. Bell had not yet begun his instructions, so the benefits to be derived from them were still prospective.

Miss Rogers, the principal, has spent the year in Europe, studying the schools and methods of instruction there, especially in Germany. Most of the winter she was in Vienna, visiting, on alternate days, the small school of Mr. Lehfelddt, and the large school of Mr. Deutsch. Her method was to make daily notes of the progress of the pupils in both schools, and write these out fully for the use of her assistant teachers in Northampton. Mr. Hubbard says of the German schools, as observed by Miss Rogers and himself, and compared with American schools:

"It is found that a direct comparison between our own school and those in Germany taught by articulation is difficult, on account of the difference in the methods and character of the teachers in the two countries, and the habits of thought and study among the people. Our American teachers are generally younger, and more active and versatile in their modes of thought and instruction; while the German teachers are slower, more plodding and methodical, following fixed rules rather than adapting themselves to the capacity of different scholars and classes. Indeed, the chief differences between the various European schools of articulation appear due to the teachers rather than the nominal methods pursued. Where the instructors are young, zealous, and interested in their work, the schools are good, by whatever system they are taught; wherever, from any cause, the enthusiasm is less, the instruction is apt to be more mechanical, and of comparatively little value. In our next report we hope to present a more detailed comparison of our methods with those of Europe."

The corporation recommend that some preliminary examination and classification should be made of the deaf-mute

* *Annals*, vol. xvii, page 1.

children of Massachusetts who apply for admission to the three deaf-mute schools now open to them, viz., the Clarke Institution, the Boston Day-School, and the American Asylum. On this point Mr. Hubbard says:

"In each of these schools a different method of instruction is pursued, and each of these methods is better adapted to the needs of certain classes of children than the other. Those who can be taught articulation with advantage, and who, belonging in Boston or its vicinity, can live at home and enjoy the benefits of parental care, should enter the Boston School; those who are unable, or whose parents are unwilling to take this course, should be received at the Clarke Institution, if they are suitable subjects for our instruction; while those (of whom there are many, no doubt) who are not likely to profit by instruction in articulation, or who cannot be received at Boston or Northampton for want of room, should go to Hartford. The choice of a school is left by law with the Board of Education; and it seemed proper to the corporation to propose to this board, and to the authorities of the Hartford Asylum, a joint committee to examine applicants, and assign them to the several schools according to their fitness and the wish of their parents. This proposition has not yet been accepted by all the parties consulted, but we are still of opinion that joint action on the part of the three schools would be best."

This report, like those of most of the other institutions, bears testimony to the inaccuracies of the census of 1870 with regard to the deaf and dumb, and in this case the testimony has peculiar weight from the fact that a previous enumeration had been made by a member of the corporation. The report says:

"Our hope that the United States census of 1870 would give a more complete enumeration of the deaf-mute inhabitants of Massachusetts and of the country than had formerly been made seems likely to be disappointed. The preliminary census tables, as first published, allowed but 538 deaf-mutes in Massachusetts, and though these have since been revised so as to increase the number, we have reason to believe that this is still too small by three or four hundred. A member of our corporation, during the year in which the Clarke Institution was chartered, (1867,) made a special census of deaf-mutes in about three-fourths of the State, and obtained the names of about 800, which, with some additions, were deposited with the Board of Education in 1868. From this list it was estimated that the number in the whole State could not then be less than 1,000, when the population of Massachusetts was not more than 1,350,000. In 1870 the population had risen to 1,457,351, and

the number of deaf-mutes must have been at least 1,050. On the list above mentioned, 752 were entered with particulars of age and sex, and, in many instances, the occasion of deafness, and the time of its commencement, were returned. It may be doubted whether a perfect enumeration of deaf-mutes, particularly of children under ten years, was every made in any country. If such a census should be taken in the United States, we believe it would show the whole number of all ages to be more than 25,000."

In the *Maryland Institution* there are two new teachers, both hearing ladies: Miss Nannie C. Berkeley, and Miss Mary H. Nodine. The latter teaches articulation. Last year, the principal, under direction of the board of visitors, visited the schools of New York and Massachusetts in which articulation is made the basis of instruction. Of the results of his observation and the progress of articulation in the Maryland Institution, Mr. Ely says:

"The results attained in this comparatively new field of labor are very interesting, worthy of careful study, and testify to the patient effort and devoted zeal of those who are prosecuting the work. With such examples before them as it was my pleasure to witness in New York, Northampton, and Boston, it is not to be wondered at that those who teach wholly by this system should manifest so much enthusiasm in its defence. Still, I am forced to believe that what has thus far been accomplished in this country by the method, while affording great encouragement to continued effort, is not a sufficient test of its merits, and that not until these schools have been in operation for such a period that pupils can be shown who have passed through a complete course, possessed not only of facility of utterance, but of well-furnished minds, can its superiority over the system in common use be established. At the opening of this session a class in articulation was formed, composed of about twenty five pupils taken from the various classes. Among this number is one semi-mute who is able to speak with ordinary fluency. His attention is given mainly to lip-reading, in which he is making rapid progress. Of the others, the majority are able to speak some words or have some recollections of sound. A few are congenital mutes. The class is divided into five sections, each section receiving daily an hour's instruction. The time is so arranged as not to interfere with the regular classes, in one or other of which each articulation pupil keeps his place. Thus the knowledge of the various branches of study is acquired in the sign classes, while the work of the teacher of articulation is confined strictly to the development of the pupil's power of speech. The success which has thus far

attended our experiment has been very gratifying, fully justifying, in my opinion, the effort. Some of those who were able upon entering the class to speak a few words have added very considerably to their vocabulary, while in clearness of utterance they have also made a good degree of improvement. It is with these that the greatest encouragement to labor is offered. Three of the congenital mutes whom we have commenced to instruct in this art have made such progress as not only to prove the possibility of their learning to speak, but to encourage the hope that it may be carried to such an extent as to be of practical use."

During the past year a shoe-shop has begun operations, and it is urged that cabinet-making be taught also. Upon the difficulty experienced by deaf-mutes in acquiring trades after graduation, Mr. Ely says :

"It is a frequent complaint among the graduates of our institutions that the way is not open for them to enter the various trades, or that it is hedged about with such difficulties as are not presented to others. And there is a real difficulty here. Hence it is that some, fancying there is an unfriendly feeling towards mutes among business men, become disheartened, and fail to occupy the honorable position in society for which they are fitted, and in some cases even become dependent upon the community. It is not strange that a man not familiar with mutes should hesitate to receive a deaf and dumb boy as an apprentice, nor when he has several applicants, that he should almost invariably choose the hearing boy ; nor does it argue on his part any unfriendly feeling towards mutes in general. His ignorance of the deaf and dumb leads him to regard the difficulty of giving instruction much greater than it is. The deaf and dumb are good imitators. An intelligent one, determined to master his business, will learn as much by the use of his eyes as will the more favored by the use of eye and ear both. This, however, is not generally known. Hence the difficulty of finding suitable employment will continue to meet the mute as he passes from school to active life. How much better if we, who know his wants and his capacities, can give him such a knowledge of his trade that when he seeks employment he can give a specimen of his own work as evidence of his ability. It is not necessary that he should be a master workman. If he has only learned the first principles of the business, the chief objection in the mind of the employer is removed."

We are glad to notice that the institution has a reading-room, the periodicals of which are not limited to the free newspapers of the State, and that a library of two thousand volumes, consisting of juvenile books, historical

and scientific works, books of travel, encyclopædias, etc., has been purchased. Whatever tends to create a taste for reading and independent study in the pupils of our institutions confers upon them a great benefit.

The *Boston Day-School* publishes no independent report, but it is noticed in the report of the superintendent of the Boston public schools. Mr. A. Graham Bell taught for six weeks in the school last year, dividing his time between the practical instruction of the pupils and the teaching of the teachers in the theory of the system. Of the result of this experiment Mr. Philbrick says that it convinced him "of the practicability of teaching even congenital mutes *perfect* articulation, and also that, by the system of Visible Speech, good articulation can be secured in much less time than is required to produce the same result without its use. It is, in fact, a new and powerful instrumentality in the instruction of deaf-mutes."

In the *West Virginia Institution* the only change has been the addition of one teacher, Miss Lucy White. The report is chiefly devoted to matters of local interest. The buildings have been remodelled and enlarged, special provision being made for the separation of the deaf-mute and blind departments, so that one building is made to "furnish nearly all the advantages of two distinct institutions." The establishment of trades is urged.

The report of the *Halifax Institution* urges that provision for the free education of the deaf and dumb should be made by the maritime provinces of the Dominion of Canada, similar to that of the various States of the Union and the government of Ontario. "Such a course," as Mr. Hutton truly remarks, "would seem to be not only consistent with, but logically flowing from, the noble principle of *free education* now happily adopted by Nova Scotia and New Brunswick, and would prove a lasting honor to the government and the provinces which should have the enlightened liberality and public spirit to carry it out."

A class of eight pupils in articulation has been organized. One of this class, "supposed to have been born deaf, has within the last four months manifested a degree of hearing not previously observed, which is accounted for by the child's mother by the remarkable circumstance that about a month before she brought her to the institution, in October last, the child one day pulled out of her left ear something described as resembling 'the wind-gall of a herring, tough and long,' since which she seems to hear sufficiently to pick up a few words and phrases."

The *Ontario Institution* presents its first annual report. While the interior management of this institution is similar to that of those in the United States, it differs from the latter in being under the general direction of a single government inspector instead of a board of directors, trustees, or visitors. The comparative advantages of this system, and the question of *how many* directors or trustees form the most efficient board of management, constitute an interesting subject for discussion, which we are compelled to pass over for the present, though hoping to take it up at some future time.

The officers of the institution are as follows: Principal, W. J. Palmer, Ph. D., formerly principal of the North Carolina Institution; teachers, Mr. J. B. McGann, formerly principal of institutions in Toronto and Hamilton; D. R. Coleman, M. A., formerly a teacher in the North Carolina Institution; Samuel T. Greene, B. A., a graduate of the National Deaf-Mute College, Washington; Mr. J. T. Watson and Mrs. J. G. Terrill, formerly teachers in Mr. McGann's school, and Miss Annie Perry, who had been a pupil of the New York Institution.

Mr. Langmuir, the inspector, discusses in his report at considerable length the question which, on the whole, seems to be the most important one at present in the case of all our institutions: How shall the uneducated deaf and dumb of suitable age now growing up in ignorance be brought into school? The importance of this question is also urged by Dr. Palmer, who has taken pains to collect statistics

upon the number of uneducated deaf-mutes in the Province. The conclusion reached by Mr. Langmuir is in favor of compulsory education, the means of free instruction for all having first been provided. The present arrangement of the Ontario Institution, by which pupils receive education and partial domestic support free, but are charged with the cost of food, this to be collected from counties, cities, or villages when parents or friends are unable to pay it, must be quite inconvenient in practice. Experience in our State institutions has shown beyond a question that for the State to provide everything needed and then make education free to all is the simplest, fairest, and, on the whole, most economical method. In addition to this, many of us believe that the education of the deaf and dumb should be made compulsory.

The method of instruction adopted in the Ontario Institution is that pursued in the older institutions of America. Instruction is to be given in articulation, so far as recommended by the Washington conference of principals.

The establishment of shops for teaching trades is strongly urged by both the inspector and principal. Eight pupils are now working at the carpenter's trade.

We are glad to notice in the list of expenditures that several hundred dollars have been devoted to the purchase of books, maps, and pictures, and two hundred dollars to "amusements."

The *Montreal Protestant Institution* also sends us its first report. The principal is Mr. Thos. Widd, a deaf-mute, and there is one assistant instructor, Miss C. Bulmer, who teaches articulation. The institution is dependent upon private benevolence for its maintenance. Such pupils as are able pay for their support. Printing is soon to be taught as a trade. Exhibitions were held in June and July of last year in the chief cities and towns of the Province of Quebec, with gratifying results.

Appended to the report is a "brief history of deaf-mute instruction, by Thos. Widd," the first half of which, as has been pointed out by a writer in the *Deaf-Mute Advance*, is

condensed from the address delivered by the late Rev. Collins Stone, at Columbus, Ohio, in 1869. In the latter part of this history we find the following paragraph:

“Two years ago the United States Government sent a commissioner to Europe to inquire into the merits of the various systems of instruction. Every institution for deaf-mutes of importance in the Old World was visited, and on comparison of notes, the palm was given to the Glasgow school, where signs are used to a very limited extent, and articulation has long been discontinued or confined to semi-mutes.”

We should be glad to have Mr. Widd give his authority for this statement. We were not aware that such a commissioner had been sent, or that such a report had been made.

MISCELLANEOUS.

BY THE EDITOR.

The Deaf and Dumb in Parliament.—We published last year* an article by Mr. Elliott, of London, describing the unsuccessful attempt made in Parliament to extend the provisions of national education to the deaf and dumb and the blind of Great Britain. The attempt was renewed this year, and the subject was discussed in Parliament last March upon a motion that the “Education of Blind and Deaf-Mute Children Bill” be read a second time. The only member who spoke in support of the bill was its mover, Mr. Wheelhouse. He said—we quote from the published report of his speech—

“The object of the bill was to provide for the education of a class of children who, though they had a special claim to consideration, had hitherto suffered neglect. England was the only civilized country which had not, in some way or other, made provision for the education of blind and deaf-mute children whose parents were too poor to make the provision themselves. It was true that the poor-law acts contained a few clauses in reference to the care of such children, but they were dealt with under those acts in a very perfunctory manner at best. What he now sought to do was to make the Government responsible, and to undertake a wider duty than that indicated in the poor-law acts. The existing benevolent institutions had

* *Annals*, vol. xvi, page 174.

the care of but 10 or 12 per cent. of these children; so that as many as 90 per cent. received no education whatever. When the Education Act of 1870 was passed, the Government said it was to provide for the education of every child in the kingdom. All, therefore, that he now asked them to do was to carry the announcement into complete effect by passing this supplemental measure; and he maintained that he had a good case, for if it was right to provide for the education of children who were neither deaf nor dumb, how much more ought they to provide for those who suffered from those infirmities, and who without education were but mere waifs and strays? The principal clause of the bill made it compulsory upon either the poor-law guardians or the school boards to look after the education of blind, deaf, and dumb children whose parents were without means; but the power was of a mild character, lest every reasonable chance might not be afforded for the instruction of every child of that class. The objection would probably be raised that a burden would thus be thrown upon the ratepayers which they ought not to bear. That was easily disposed of; for, except in large towns, the number of such children belonging to poor parents would be comparatively small, and their maintenance would incur a cost so slight that scarcely a single ratepayer would think it worth while to raise any objection."

Several speeches were made in opposition to the bill, the objections being similar to those made last year, and the same confused ideas of the peculiar needs of the deaf and dumb and the blind being apparent. The distinguished Mr. Forster, who is vice-president of the Council of Education, and another member, objected to the bill that it made no discrimination between the children of rich and poor parents—a provision which, in the institutions of this country, is regarded as wise and just in theory and excellent in its practical workings. Some members claimed that it would be much better to send the deaf-mute and blind children to ordinary schools for hearing and seeing children, "paying the schoolmaster a special fee of five pounds, perhaps, for the purpose of devoting special attention to any such child." But Mr. Forster wisely "feared that for this arrangement to be thoroughly successful it would be necessary that the schoolmaster should possess exceptional abilities and patience." He said he "should require a good deal more information upon the point before he could recommend the adoption of that course all over the country." It was

further objected that the effect of the plan proposed would be "to pauperize" those who were to be benefited by it. The compulsory nature of the education provided for in the bill was also made a ground of objection. The motion for a second reading was finally negatived; the effect of this being, as we understand, to defeat the whole movement, at least for the present.

The Manchester Society for the Benefit of the Adult Deaf and Dumb.—The "Manchester (England) Society for Promoting the Spiritual and Temporal Welfare of the Adult Deaf and Dumb" has done much since its establishment in the year 1850 to benefit this class, which numbers about four hundred in Manchester and its vicinity.

The society is under the patronage of the Rt. Rev. Lord Bishop of Manchester. It is supported chiefly by voluntary contributions from the public, its income for the year last reported being about £258. Its affairs are managed by a committee of fifteen gentlemen, of whom Robert Gladstone, Esq., is president.

The chaplain of the society, the Rev. Geo. A. W. Downing, conducts two or more religious services in the sign-language every Sunday; devotes four hours a day to the work of the society, viz., attendance at the rooms, visiting the sick and distressed, obtaining employment for the deaf and dumb, and acting as interpreter when required, seeking increased public support, etc., and holds himself "ready at all times to visit urgent cases of sickness, and in every respect to act as the pastor and adviser of the adult deaf and dumb." His labors having been much increased by the formation of branch societies in the neighboring towns of Oldham, Bolton, Ashton, and Bury, Mr. Albert F. Woodbridge was recently appointed assistant missionary.

The objects of the society are: "1. To continue the religious and secular instruction of the adult deaf and dumb in Manchester and the neighborhood who have been educated when young, and to provide such instruction for those who have not been previously educated. 2. To assist in obtain-

ing employment for the deaf and dumb, and to provide an interpreter in cases of dispute or misunderstanding between them and their employers. 3. To visit the sick, unemployed, and others, at their homes, and to grant pecuniary relief in cases found to be really deserving." Provision is made for social intercourse. There is a lending library, containing some four hundred volumes, and a reading-room. During the spring a weekly lecture has been given at the rooms on some topic of general interest; in several instances the lecturers were themselves deaf and dumb, and at other times the lectures were interpreted by the chaplain.

The work, on the whole, is quite similar to that so admirably performed by Dr. Thomas Gallaudet and his assistants in New York and other American cities; and in England, as in this country, the deaf and dumb show their appreciation of it by a full attendance at the religious services, and by contributing to the support of the society.

The Former Pupils of the Yorkshire Institution.—Five times since the establishment of the Yorkshire (England) Institution, in 1829, Dr. Charles Baker, the head-master, has made a systematic and thorough investigation into the course pursued by the pupils after leaving school. A summary of the results of the fourth investigation, made in 1859, with extracts from the letters received in reply, was given in a previous volume of the *Annals*;* the last investigation was made in 1870, and the returns are now before us in a pamphlet of eighty pages, printed by the pupils of the institution. The inquiries pertaining to these investigations have been addressed to the parents of the pupils or their employers, as well as to clergymen and other respectable persons competent to speak with authority, and have embraced three especial points, viz., the trades to which the pupils were apprenticed, the facility with which they acquired these trades as compared with persons not deaf and dumb, and their conduct and general character since leav-

* *Annals*, vol. xii, page 133.

ing the institution. In the last instance, returns were received concerning 409 of the 754 deaf-mutes who have been pupils of the institution since its beginning. We quote the following summary of them :

“Among the occupations of male pupils there are 39 boot and shoe-makers ; 25 are employed in mills, factories, and clothing trades ; 23 are tailors ; 21 are lithographers, engravers, artists, or pattern-designers ; 20 are laborers and farm-servants ; 18 are letter-press printers, compositors, bookbinders, or type-founders ; 15 are engineers, mechanics, or iron-workers ; 14 are joiners, carvers, or cabinet-makers ; 12 are cutlers, or in Sheffield trades ; 12 farmers ; 11 brickmakers, masons, or quarrymen ; 11 painters and decorators ; 8 gardeners ; 13 are sundry trades, and 4 are unaccounted for : total, 246.

“Of the female pupils, 50 are engaged in domestic duties ; 61 are dressmakers or milliners ; 29 are employed in mills or factories ; 22 are servants, laundresses, or charwomen ; 8 are engaged in sundry occupations, and 3 are unaccounted for : total, 173.

“These totals make 419 ; 308 of them acquired their business as well as the average of young persons, 52 more readily, [!] 37 less readily, and in 22 cases the result is doubtful or unknown.

“With regard to conduct and character, 340 of the whole number are favorably reported of, viz., 199 boys and 141 girls ; 44 very favorably, or above the average of young people, viz., 27 boys and 17 girls ; 17 unfavorably, viz., 12 boys and 5 girls, and 18 instances are doubtful—making the total of 419.”

The pamphlet gives many interesting details concerning individual cases—generally in the words of the writers ; we are sorry our limited space will not permit us to give some specimens of the communications received. The collection and collocation of all these returns must have involved no little labor ; but it is a labor which earns a rich reward in the proof they furnish of the inestimable blessing conferred upon the deaf and dumb by their education, and of the benefit to the community in an economical point of view. We wish a similar course of inquiry might be pursued by every institution for the deaf and dumb ; the results could not fail to be valuable, as well as interesting. Thus far, these investigations and reports of Dr. Baker’s are the most complete and exact that have been made. The profession in general, as well as the Yorkshire Institution, owe him a large debt of gratitude.

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THE COMBINED METHOD OF INSTRUCTION FOR
THE DEAF AND DUMB.*

BY O. F. KRUSE, SCHLESWIG, GERMANY.

[ASIDE from the importance of the subject discussed, the following treatise will have a special interest for our readers, from the fact that the writer is himself a deaf-mute.† was educated in an institution for the deaf and dumb, and has been a teacher for more than fifty years. He is the author of several other works relating to the deaf and dumb and education in general, on such subjects as the condition of the deaf and dumb without education, the early home training of deaf mutes, the deaf-mute as a citizen, common schools, etc., which have gained him some distinction as a writer. This treatise, published three years ago, has given rise to much discussion among the German teachers. It has been translated into French ‡ by the instruc-

* Translated from the German. The full title of the pamphlet in the original is "Zur Vermittelung der Extreme in der sogenannten deutschen und französischen Taubstummen-Unterrichts-Methode. Ein Versuch zur Vereinigung beider."

† Mr. Kruse always speaks of himself as a deaf-mute. Probably, however, it would be more correct to call him a semi-mute, as he lost his hearing at the age of six years.

‡ "Essai sur la Conciliation des Méthodes, dites Allemande et Française, d'Enseignement des Sourds-Muets." We have had this excellent translation constantly at hand while translating from the German, and desire here to acknowledge our indebtedness to it for the occasional suggestion of words and phrases.

tors of the institution at Handsworth Woodhouse, Sheffield, England, with a valuable introduction by the distinguished Canon de Haerne, which we regret that want of space prevents us from reproducing in the present number of the *Annals*. The author's statement of the views and claims of the French and German methods, respectively, must be acknowledged by the adherents of either side to be remarkably full, clear, and impartial, while his attempt at the reconciliation and combination of the two will meet with warm interest in this country, where, within the past few years, so many earnest efforts have been made to establish a successful "combined method." It will be seen that the plan of combination advocated by Mr. Kruse differs widely from that generally adopted here.—ED. ANNALS.]

PREFACE.

In preparing the following treatise, I have been influenced by the belief that the opposition now existing between the German and French methods of instructing the deaf and dumb might, by mutual concessions, be so reconciled as to permit the development of *a single system* of instruction, which should combine the advantages of both. I am well aware that my views will not receive the assent of *all* teachers of the deaf and dumb; but at least I trust I have succeeded in opening to all the advocates of the conflicting methods a fair field, where they can meet, compare views freely, openly, and candidly, and come to an understanding of each other's opinions.

Every one whose eyes are open to the truth, and who does not dread its light, will readily admit to himself and to others that his own work, even though it were the best in the world, has, like all human productions, its defects, weaknesses, and faults, which might be remedied or removed by considering and weighing the contrary opinions and more or less reasonable objections of others. It is quite certain, as will appear from the following investigation, that deaf-mute instruction can by no means dispense with articulation as a lever and support; but on the other hand it is equally certain that, since articulation has proved an insufficient

means of instruction, the sign-language must necessarily come to its assistance. But if it be established by an examination of the facts that articulation and the sign-language are two authorized factors of deaf-mute instruction, though it may be in an unequal degree, truth demands of the French method, which depends exclusively upon the sign-language and writing, that it shall recognize the rights of articulation and incorporate this into its system; while it is an equally proper demand that the German method shall cordially accept the co-operation of the sign-language. The French teachers must conquer the old, long-cherished prejudice which has led them to claim that articulation is not an essential part of deaf-mute instruction; and the Germans must abandon their exaggerated, narrow-minded, and unreasonable fear that the sign-language will endanger the real interests of articulation. Each side must be convinced that by the combination of these two factors of instruction, provided they are placed in the right relation to each other, a single rational system of teaching may be developed.

The author has especially endeavored to elucidate and correct the prevailing obscure and erroneous opinions upon the nature and essence of the sign-language, by which so many teachers of the deaf and dumb have always been betrayed into an under-estimation and depreciation of this means of instruction, feeling that he is called and impelled to this task by the fact that he himself is a deaf-mute who has been educated in an institution for the deaf and dumb; and it would afford him the greatest pleasure if he should succeed merely in giving an impulse to the restoration of this despised instrument, which seems to him an essential auxiliary to the instruction of the deaf and dumb, to its old place of honor. To prove the importance of articulation, the author believes that he may appeal even more to *a posteriori* than to *a priori* reasoning.

If any voice still has a claim to be heard in the discussion of the question at issue it is surely that of a deaf-mute teacher of deaf-mutes, who has this advantage over others, that he can appeal to the facts of his own experience.

Of course, the author does not suppose that his treatise has solved the important question of the day which is its subject; but he desires to add some fuel to the fire of discussion, trusting that the longer the metal of deaf-mute instruction is tried in its flames the more refined and purified it will become. This is his confident hope; it will also be his consolation, if his good intentions are called in question, and even if he is exposed to a yet more violent personal attack.

INTRODUCTION.

Which is right: the German or the French method? This is the tormenting, dividing question that for a long series of years has stirred the minds and hearts of instructors of the deaf and dumb everywhere. There are probably few teachers who, in the presence of these opposite views of the theory of instruction, which ever become more and more important, have not been forced to doubt whether they themselves were upon the right path, and who have not realized how much this doubt, from which it is so difficult to escape, paralyzes every effort of enthusiasm and of the most active zeal. The matter is no longer one of mere amateur interest for us, the teachers of the deaf and dumb. It is a question with which we must endeavor to deal more earnestly than ever. The desire of some of the leading members of our profession, now more plainly manifested than ever before, for the removal of the sharp points of difference, and for reconciliation with those opposed to us, who are yet laboring in one and the same work and for the same end, is a guaranty to us that, in offering a word of advice to our worthy colleagues, we shall not be as the voice of one crying in the wilderness; and we cherish this hope the more confidently since, instead of resting upon the laurels of our masters and teachers, or relying upon the authority of any other men, however great, we shall endeavor to examine the important subject of deaf-mute education with our own eyes, freely and candidly. It is not necessary that

a teacher of the deaf and dumb should offer an apology for publishing his views ; on the contrary, it ought to be regarded as the sacred duty of every one engaged in the work, who believes that he can contribute anything to the solution of this problem, to express his opinions, whatever they may be, whether of assent or dissent, openly and unreservedly, without regard to favor or disfavor upon the right hand or the left, from above or below, in order to promote, to the extent of his ability, the desired and necessary elucidation of the matter at issue.

It surely is not a favorable augury for the art of deaf-mute instruction that to reach one and the same end we choose two divergent paths ; that in fact we take two directions, which, since they are diametrically opposed, must necessarily exclude each other ; which, though they have each had much success, can both be proved to have failed of success. Alas ! of what avail is the most honest endeavor ; what can pains and labor and effort accomplish, when we and all the world know that we are still at strife among ourselves ; that we are not yet in possession of the jewel of truth, though we have sought and striven for this treasure with body and soul ? None of us can avoid the confession that in the war of our preconceived opinions and views we ourselves increase the difficulty of the task which is already so difficult in itself.

Indeed, whether we teach according to the German or the French system, in each there is much that is true and much that is false. At least, it cannot be denied that these two creations of the human mind have their weaknesses, imperfections, faults, and palpable defects, which might perhaps be remedied by the interchange of their methods. Let us honestly confess wherein we have erred and failed, and frankly and openly, without selfishness or jealousy, look our opponents in the face. It may be that we shall learn much from them ; in their field we may find many grains of truth worthy to be planted in our own. Let us examine our own method without prejudice, and let us hold fast that which is good, from whatever source it may come.

Since, with our widely-varying methods, we arrive at results so similar, it is quite certain that we are not so far apart from each other as we like to believe; that in all our doing and suffering we stand upon the same ground, and therefore might the more readily come to an understanding of each other. It is, in fact, only the *outward forms* that distinguish our methods and divide us, not the *essence* of the system. Now, if we agree in the essentials, the true and genuine forms will soon be found by an honest search. The German method insists that the essence of deaf-mute instruction is chiefly reached through *articulation*; the French method, on the contrary, that it is best reached through *signs* and *written language*. One of these theories has as much claim to intrinsic value as the other. Since, then, these two forms have sprung directly from the root of the tree and have thriven apart, we should regard them as equally authorized forms, and not as opposite poles, which must interfere with each other. Whoever, therefore, disregards or wholly ignores either of these necessary members of the body of instruction does an injury to the organism, and inevitably imposes limits upon its free and natural growth. True, Germans and Frenchmen may boast of their respective systems that, notwithstanding the difference between them, they have produced happy results; but who will venture to say that, if both the factors of instruction had been regarded, a yet richer and more abundant harvest would not have been reaped? Who will venture to say that the deaf-mute would not have had a broader education, and not only his intellectual but his spiritual nature have been more fully developed? Certainly none of us can deny that our own method (the German) lacks power in just the degree in which we reject the other factor of instruction—the sign-language. The French method, since natural signs are insufficient, lays hold of artificial signs, which are injurious; an error into which it would not have fallen if it had made use of articulation. The German school, on the other hand, would not have been guilty of pressing its theory to such an excessive degree, which alone has been enough to bring

it into discredit, if it had had a fuller and juster appreciation of the advantages offered by the sign-language. Let us not suppose that a perfect, living tree can spring out of the barren soil of arbitrary, unnatural forms; let us rather keep ourselves in entire submission to the realities enjoined by nature, and not allow ourselves to be so carried away by presumption as to deny or reject either of these equally authorized forms.

1. *What are the forms or realities which distinguish the French and German methods of instruction?*

The very first attempts to teach the deaf and dumb were characterized by a tendency to different methods, which, however, were not very clearly defined. It was only when the art was farther developed, and reduced to more scientific principles, that one method began to predominate over the other, and to become the prevailing rule of instruction. In this connection, two men in particular created an epoch in the history of deaf-mute instruction: the French Abbé de l'Épée, (born Nov. 25, 1712, at Versailles; died Dec. 23, 1789, at Paris,) and the German, Samuel Heinicke, (born April 10, 1729; died 1790.) The Abbé de l'Épée gave prominence to the language of signs in the instruction of deaf-mutes, regarding this language as an innate reality to their minds, from which the development of their intellectual life must proceed, and upon which their instruction must necessarily be based. Heinicke, on the contrary, maintained that, though signs might be the form in which the conceptions and thoughts of deaf-mutes naturally clothed themselves, yet such persons were none the less inclined to think in the forms of our language, that is, of articulate speech; and that the deaf-mute could succeed in learning to think in words—the chief end of his instruction—by being taught to speak, but not by means of gesticulation. While, then, De l'Épée regarded the *sign-language* as the basis of instruction, Heinicke claimed the greater intrinsic and more substantial value for the method of *articulation*.

To these two systems of teaching, more or less developed, all the schools for the deaf and dumb which afterwards arose joined themselves, and were divided, according as they enlisted under the banner of the French or German leader, into the French and German schools. The French method, though at first more favorably received and widely extended, seems to be gradually losing ground, while articulation, on account of its more salutary influence upon the intellectual being, excites more and more attention, even among the most orthodox of the French teachers, and in some places has already received favorable consideration. But unfortunately the course of many French teachers shows us that they have not yet arrived at a perfect insight into the essence of the articulation method, since, from their great affection for their own child, they make the adopted child of articulation subordinate to it. We feel impelled to warn our colleagues on the other side of the Rhine most earnestly against any such combination of the two systems as this. Such half-way work can benefit neither the instruction nor the pupil. We entreat them to guard against it, since, in this way, they are in danger of being betrayed into a false, mistaken estimate of the intrinsic value of the German method. One should either accept the guidance of the German method, with all its consequences, or reject it entirely; any third course is injurious. But if our colleagues across the Rhine have almost always returned from their attempts at articulation with a very unfavorable opinion, and if they sometimes make a wrong use of articulation, it is partly our fault, since our own ideas show a lack of clearness and precision, and we always press them too far in the hope of being able to allay the not unreasonable hesitation of our opponents. When the united efforts of the adherents of articulation shall have succeeded in purifying the real gold discovered from the dross of the excrescences and excesses clinging to it, at which our adversaries very properly take offence, we may hope that the German method will at last make its way everywhere.

While in former times only single isolated deaf-mutes

received education, the Abbé de l'Épée and Samuel Heinicke established permanent institutions expressly for the instruction of the deaf and dumb: the former at Paris, in the year 1755; the latter at Leipsic, in 1777, having previously been engaged in the instruction of deaf-mutes in various places. By the establishment of these institutions, the two men had the best possible opportunity for observing in every relation and direction the intellectual being, life, and action of deaf-mutes, of studying the mysterious inward nature of such persons, and, finally, of building, upon the psychological knowledge which they gained, systems and principles of instruction. But while the genius of the Abbé de l'Épée was more occupied in studying the peculiar characteristics of the deaf-mute, and in devising peculiar methods in accordance therewith for arousing, developing, and educating the intellectual power, the practical mind of the German, who was less a philosopher than a skilful teacher, regarded the deaf-mute as occupying a position midway between that of a person endowed with all his faculties and one deprived of hearing, and believed that he could be taught, if not strictly and absolutely, at least approximately, according to the general principles of instruction.

De l'Épée's creation, then, is to a certain extent an *idealism*, and the German Heinicke's a *realism*. So the works of the two men have each their excellence, but also the defects of one-sidedness. The deaf-mute is as little an absolute realist as an absolute idealist; his peculiar nature can no more be denied than his common human nature. Perhaps the empirical efforts of the present day will succeed in striking the golden mean between the ideal and the real. The two conceptions are only different views of the same thing, according as it is looked at from one side or the other. In science, as in art, there is neither an absolute idealism nor an absolute realism.

The two men agreed in this: that the education of the deaf-mute must depend upon the formation of language; that only in the language of words could he receive, assimilate, and make his own the knowledge to be imparted to

him, and, in general, all kinds of representations, conceptions, and ideas. Therefore, they both made it their chief aim to discover how they should impart this language to the deaf-mute. But easy as this purpose might be to form, it was very difficult to realize. How was a deaf-mute ever to be initiated into the forms of thought which existed for the hearing person, but not for him? How was he ever to form a thought by means of signs which were not the signs of his intellectual conception? Was it at all in his power to think in audible signs, when nature had provided that he should express his ideas in visible forms—in gestures?

Well, said the Abbé de l'Épée, let the poor deaf child speak in his own way; let him express himself in gestures! If he has forms at hand in which he expresses his ideas, by means of these forms he can learn to appreciate those other forms which also express ideas, though in a different manner. Must not the deaf-mute, who naturally thinks in signs, be able to think in any kind of signs, and so also in those of our language? Since words represent something to him through gestures, can he not also make words the signs of his ideas? Yes; if the words signify the same thing that the gestures express, they must at least appear to him as the representatives of the gestures, and be recognized by him as signs standing for ideas. Thus, thought De l'Épée, can the deaf-mute, by a simple interchange of the two signs, however heterogeneous they may be, learn to write and to read.

Oh, no! answered Heinicke, No! Let the deaf child also learn to speak, to articulate! Even granting that it is not altogether natural to the deaf-mute to think and express his thoughts in articulate sounds, yet it must be that he has the capacity and disposition to fix his ideas and conceptions in words, which are the most usual forms of human thought. Develop this hidden capacity or faculty; kindle this little spark; teach the deaf-mute from the beginning to connect his ideas directly with the spoken signs, and follow this method consistently; thus is the path to thinking in words already broken. Even supposing that the deaf-mute found

no difficulty in the artificial or conventional signs of the language of gestures devised by De l'Épée, my pupil would sooner and more easily be satisfied with spoken words for the expression of thought.

Though little objection may be made to either of the views of the two men thus presented, yet they must both, Heinicke as well as De l'Épée, be charged with mischievous error in the application and development of their fundamental principles. It is yet a question whether the means recommended by De l'Épée—the sign-language, whose first duty it is to introduce the deaf-mute into the sphere of our language—really succeeds in entirely fulfilling its high mission. It is possible that the defects of the natural language of gestures may be made good by the addition of methodical signs; but these acquired forms do not contribute in the least to the creation and assimilation of thought, as words do. The sign-language, even though it rises to the level of the signs of word-language, cannot renounce or get rid of its plastic form without destroying itself; consequently it does not admit of abstract thought, and so fulfils the aim of language only in a limited degree. Its great value is not to be denied; but with these defects can the teacher feel satisfied with it? Must he not seek after other means by which abstract thought may be promoted, and the gate of language opened wide?

But as regards the use of articulation as a means of instruction, it may be asked whether this, although it may exert an influence upon thought, can exercise that influence without the co-operation and intervention of the sign-language; for it must be affirmed most positively that a congenital deaf-mute cannot learn to think, speak, and write upon the basis of articulation only. Heinicke, like De l'Épée, goes too far, when he maintains that the deaf-mute, through simultaneous and continued presentation of ideas and conceptions in spoken words, can be made master of them. Will that which system cannot accomplish be obtained through mere practice? Assuredly not.

If De l'Épée, as is evident, regarded the deaf-mute too

much as a deaf-mute to be able to claim for his pupils the general principles of the development of language among men ; if he denied to the deaf-mute the power of speech as absolutely as that of hearing, Heinicke fell into the directly opposite error of overlooking the deaf-mute's peculiarities, and thus wholly ignoring the realities of his nature, which necessarily limit him in the acquisition of spoken language.

It is certain that the two methods, articulation and the sign-language, are equally authorized elements of instruction ; but the relation of each to the other and to the course of instruction must be more closely defined. This topic will be discussed in future chapters.

2. *What are the principles of the French and German methods, respectively?*

The French method proceeds upon the following principles:

1. While hearing persons speak by means of the vocal organs, deaf-mutes speak by gestures and facial expressions. For the former, articulate speech is the basis of the creation of language ; for the latter, signs are the ground and foundation upon which the teacher is able to impart language to them. Ideas of every sort in the deaf-mute's mind take the form of signs ; so it is only by means of the sign-language that the instructor can convey to him what he has to learn.

2. As the hearing child learns language only through the language which he already has, and which he has created for himself, so must the deaf-mute's own language, the sign-language, be his only master to teach him language.

3. At all events, the deaf-mute can learn language, which for him is a foreign and heterogeneous thing, only by the way of analogy and induction. The sign-language, then, is the key which opens to him the gate of language.

4. Though it be true that spoken language is best adapted to fix ideas represented by words, yet it does not follow that it is the universal and absolute form of thought. For those who can hear it may always be a convenient medium

of thought; but it is not the same for those who cannot hear and speak.

5. For those who cannot hear, who have their hearing, as it were, in the eye, nature demands other and visible forms for the expression of thought. This demand is met by the sign-language, which places the deaf-mute in easy communication with his teacher.

6. If the natural language of signs, which the pupil brings with him to school, be developed and perfected, so as to provide signs for all kinds of conceptions and their combinations and relations, (such as are afforded by word-language,) the deaf-mute can think in the sign-language thus formed as well as we do in words. (???)

7. As this methodically-formed sign-language renders the same service as words, there is no necessity for the deaf-mute to learn articulation, which is far from performing the same office for him that it does for the hearing person.

8. In any case, we must believe that the relation between thought and speech, destroyed by the lack of hearing, can be restored only by the intervention of the sign-language. Every one must acknowledge that the German method, by means of articulation alone, can accomplish very little. Nothing can be truer and more certain than that *no* deaf-mute can learn to think, speak, and write without a language of signs.

9. We must reject as unproved and unreasonable the assertion that no man can think without words, since man can often make his thoughts known in pictures, or in movements of the face, hands, etc., which correspond in a certain degree to pictures. Now, if a simple painting can call up images in the mind, the much finer and sharper pencil of the sign-language must be able to represent the most subtile and sublime conceptions and the most abstract ideas. By the living and powerful expression of pantomime a whole world of thought is conveyed to the deaf-mute, of which the hearing person could scarcely form an idea. So pantomime in many circumstances displays great eloquence, and is far

more powerful than words wherever an impression is to be made upon the heart, feeling, and disposition.

10. But for abstract thought we have not only the methodical language of signs; we claim writing also for that purpose. Whatever the sign-language lacks in this direction is supplied by writing. In the form of writing, words impress and fix themselves upon the minds of our pupils, and thus—provided the soil has previously been well cultivated and prepared for the comprehension of language, by means of the sign-language—they become the vehicles of thought. As to whether writing or articulation exerts the greater influence upon thought, there need be no controversy between us and our opponents; for it can be psychologically proved that spoken words have no more connection with ideas than written words.

11. For deaf-mutes, moreover, writing and articulation are both alike dead forms, to which they can and must adapt themselves, when they have acquired a certain command of words. If our method succeeds in inspiring in our pupils an irresistible impulse to fix their thoughts in words, we may expect that with words they will master writing. It is no wonder, then, that our pupils generally have a strong inclination to think and speak with their fingers, or to write in the air, (dactylology.) Articulation, like writing, offers an indigestible food which only hunger can digest. As means of instruction the two stand upon the same footing, since they are alike instruments which the pupil uses only under the pressure of necessity.

12. What is the reason that our opponents have such an aversion for the manual alphabet? Do not pupils read more rapidly, easily, and correctly from the motions of the fingers than from the lips? Is it not a great waste of time, when the teacher is compelled to speak slowly and distinctly, and then to repeat again and again what he has said, in case the pupil is not skilful in lip-reading?

The leading principles of the German school are:

1. Articulation is inseparable from the acquisition of the language of words as such; it is the hidden, only, and true

bond which unites the word and the thought. Necessity, then, imperatively demands that the deaf and dumb shall learn to speak, notwithstanding their want of hearing.

2. The only hindrance which the want of hearing imposes upon the deaf-mute is, that he has never been able to form any conception of sound or tone. But this is something with which he can easily dispense, since such a conception or consciousness is by no means essential to learning the word. (!!) This conception or consciousness of the relation of the sound to the word is not the only and absolute cause that the idea and the word, or thought and speech, are united within us, forming one organic vital activity of the soul. This intellectual act of the soul rather results from the simultaneous connection of ideas of things and formations of sound, (spoken words.) If the deaf-mute, then, be taught from the first invariably to connect the intellectual forms or ideas directly with the signs of sound, (words,) he will complete for himself the act of joining the idea and the word, and will bring the sign and the thing signified into unity of consciousness; and from the moment he learns to express his ideas in spoken words only, his thought will withdraw from the language of signs and grow into the language of words. Spoken words, moreover, since they designate and fix ideas in the mind of the deaf-mute, afford a medium for his thought not less valid than signs.

3. But the apparently dead form of sound is not really a dead form for the deaf-mute. Though he does not hear speech from without, yet if he has been instructed in speaking, he perceives very distinctly the formations of sound produced by himself; it may be said, that he hears inwardly. This phenomenon renders it easily comprehensible that it is much easier for the deaf and dumb to think in words by means of articulation than by means of writing or the manual alphabet.

4. If the French school really has reason to be proud of its approved method of incorporating words into the mind, that is, its hand or finger alphabet, we may with equal or

even greater justice point to our mouth alphabet, which deaf-mutes form for themselves by reading speech from the lips of others; while we also claim that stronger impressions are produced upon the pupil by the efforts made in producing sound than by the stiff and inexpressive motions of the fingers; that the physiognomy of words can be more quickly and readily developed from the motions of the lips than of the fingers, and that the words will thus take a firmer hold upon the mind.

5. If the deaf-mute is really to learn to think directly in words, the act of uniting the idea and the spoken word must be performed without the intervention of signs, which degrade the word and make it a vassal of pantomime. (! !)

6. That the sign-language is a necessary bond of union between the idea and the word we most emphatically deny. The course of instruction would never have needed the sign-language if it had not been arbitrarily introduced—if the injudicious and detrimental intermingling of pantomime had been guarded against.

7. The articulate designation should be attached directly to things, objects, activities, and qualities of things. We should show what the word or words mean by real objects, pictures, or actions, and not by gestures. If we thus give the pupil no other signs than the spoken word, he will know no other way of expressing himself and thinking—that is, of fixing ideas—than by the signs which he has received from the beginning of his education.

8. For us the sign-language has no other value than that it may contribute its part toward rendering conceptions and ideas clear and perceptible. In any case, it serves only as a preliminary means of mutual understanding between teacher and pupil.

9. If it is to be granted that the deaf-mute can make writing a medium of thought, much greater importance is to be attached to the similar claim of articulation, which has the advantage over writing in every respect.

10. Moreover, that the deaf-mute may be led to the expression of his thoughts in writing, he must learn to speak;

for writing is a representative of speech, and only on the presupposition of speech can it be a representative and vehicle of thought. It is, therefore, an unjustifiable and unnatural proceeding to teach children to write and to read without the aid of articulation.

3. *Is articulation really adapted to take the place of the sign-language in the instruction of the deaf and dumb?*

The German school, in opposition to the French, emphatically denies that the instruction of the deaf and dumb has need of the sign-language in addition to articulation. On the contrary, it maintains that, if the deaf-mute be taught to express himself by spoken words instead of gestures, he will know how to think in these signs; that is, in spoken words, like other men.

This is a very vague, untenable, and unfortunate assertion, which it would be difficult to prove either *a priori* or *a posteriori*.

Indeed, no other reason can be adduced for the assertion than that the deaf-mute, however far he may have the faculty of thinking in signs as such, must, nevertheless, be inclined by nature to think in the signs of our language, that is, the language of words, though he may have no consciousness of sound, upon which the word-signs are chiefly founded. But such reasoning as this, at least if the proposition is taken in a general sense, properly arouses the opposition of all able men who have the opportunity of looking more deeply into the nature of the case. It hardly can stand before the tribunal of psychological science.

It is true that the human soul cannot think without signs. It is also true that it has the ability to create signs for itself, and that in these only can it think. It is no less true that it can recognize signs of any kind whatever as such; that is, as symbols of ideas, and adapt and use them accordingly. But it is a great error to draw from these facts the conclusion that the soul also has the power to take signs of all kinds, audible and visible, into the immediate service of

thought. To recognize or perceive signs is not necessarily to assimilate them, to make them one's own. The essential element of assimilation is that the soul shall not only recognize the signs as such, but shall also know *how far* they are symbols of the conceptions. Indeed, the idea received from the signs is not purely spiritual; it is rather a mixed idea, rational and empirical. Not only the thinking mind, but the bodily organism also, with which it is closely connected, has its share in the idea. The soul does not create signs directly and independently, but by the intervention of outward perception—perception of the things which act upon the bodily organism. The soul chooses and accepts signs for itself in accordance with the influence of things upon the bodily organism, and it can think only in such signs as are thus received through its own perception, or *a posteriori*. The things which the signs designate must make themselves known to the soul through the signs, if it is not merely to perceive these, but also to receive them into itself. So, according to the different relations of their bodily organism, things make themselves known to hearing persons through their audible phenomena, but to deaf-mutes through their visible phenomena; consequently, the hearing form their signs of perception and thought from the elements of the sounds of things—the deaf from the elements of their figures, forms, and motions; thus the former use *words* and the latter *gestures*.

It is pretty well established, then, that speech and thought do not, as is commonly supposed, stand together in such close organic relation that the one must necessarily produce the other; the necessity is rather that the signs in which one speaks shall have an inward meaning for the soul. The sign in which the soul is to think must not only designate—it must also represent; that is, it must have the idea of the objective. For the deaf and dumb, gesture-signs have objectiveness, while word-signs have not. At least, the deaf and dumb have no natural aptitude of perception for the signs of our language, and consequently they cannot think directly in such signs, like hearing persons. Word-signs

have for them the slight interest of designation—not the interest of representation; they have consequently no absolute meaning, but only the limited meaning of the deaf-mute's own signs—gesture-signs. The use which the deaf and dumb make of word-signs is therefore secondary—outward rather than inward. They do not conceive of word-signs as direct signs of the thought or idea, but as signs of their signs, in which alone they think. So they generally regard word-signs, before these become to them direct vehicles of thought, as signs of gesture-signs.

But let it not be objected that it is unnecessary that the word present itself to the deaf-mute first, or have for him something objective, because in general it represents nothing to hearing persons. Granted that the word in general represents or portrays nothing in and of itself; granted that, with a few exceptions, (onomatopes,) it is only a conventional sign; it is not necessary that the word shall represent to the soul precisely the object which it designates, but only that it shall have something objective for the soul—that it shall recall something which has already been perceived.

As the deaf-mute can conceive ideas only in a visible form, so the hearing person cannot conceive them in other than an audible form, whether the audible forms of the words represent anything or not. When the child learns to speak, he does not imitate unconsciously, or with the mere consciousness that the words are fixed signs of ideas; but with the full consciousness that they express, if not precisely the object or the image, yet an object of his sentient perception. Who, then, will say that the child, before he begins to speak, has not already prepared himself for it in silence? Before he speaks he must think for himself—that is, inform himself concerning what surrounds him; and to this end must necessarily create signs, by means of which he may distinguish things from one another and fix his ideas. From what other source does the hearing child draw the signs by which he distinguishes things than from their sounds, which are the first characteristic tokens that impress his mind? Thus

the bleating of sheep, the mewing of cats, the barking of dogs, the lowing of cattle, the grunting of swine, etc., give him the names for objects when he can only lisp, and cannot yet speak. Though all children do not anticipate us with names, yet in thought all have spoken with the things about them; have bleated with the sheep and mewed with the cat; have bestowed names of which we have no suspicion upon almost every object of their surroundings. These names which the child gives to things, however strange or paradoxical they may sound, are the beginning, the roots and elements, of his language. The new words which he now learns are only his own names christened. No child learns to speak who has not previously talked to himself. The formation of language must have begun before the acquisition of language can proceed. If the child ever learns to speak, he learns the word as the abstraction of his own concrete designation, and at the same time the image or portrait of the word, which he no longer needs to use, becomes effaced.*

Among all the influences of outward things upon men of perfect organization, is it not audible phenomena that make the strongest, most sensible, and most permanent impression? When the visible characteristics of things are yet silent, or at least betray themselves merely through their movements; when, moreover, forms, figures, conditions, actions, etc., can be imitated only with great difficulty, as is proved to us by the slow, painful, and uncertain course of the sign-language of the deaf and dumb, then the audible characteristics of things speak all the louder, and, as it were, put their names into our mouths. Herder, in his treatise on the origin of language,† crowned by the Berlin Academy, says :

* Herodotus relates that Psammeticus, king of Egypt, caused two children, at the time of their birth, to be taken by a shepherd to a secluded place, and commanded that they should not see or hear any living creature except a she-goat, whose milk was to nourish them. After an interval of two years, during which the king's orders had been strictly observed, the shepherd, to his surprise, heard from the children the greeting, "Bec," "Bec."

† "Ueber den Ursprung der Sprache." Berlin, 1789.

“What are the first elements of language? *Sounds!* As to sight, how slowly it develops itself; with what difficulty the soul arrives at ideas of space, form, and color! Sight is not the sense best adapted to language. Besides, its phenomena are so cold and dumb; the impressions of the coarser senses are so indistinct and confused, that the ear, if anything, naturally becomes the first teacher of language. Take, for example, the sheep. As an image, it moves before the eye with all objects, forms, and colors upon one great panorama of nature; how much is in it, and this how difficult to distinguish! All characteristics mingle confusedly together; all therefore are inexpressible. Who can utter forms? Who can give sound to colors? Man lays his hand upon the sheep and feels of it. The sense of touch is surer and fuller, but its characteristics are too full, too bewildering. Who can tell what it is that he touches? But hark! the sheep bleats! Then a distinguishing characteristic detaches itself from the canvas of the painted picture; it is distinctly perceived, and it penetrates deep into the soul. ‘Ah,’ says the child, ‘now I shall know you again. You bleat!’ The dove cooes, the dog barks; there are three distinct ideas and three words: the former he endeavors to introduce into his logic, the latter into his vocabulary. So through the sense of hearing nature comes to meet the child half way. She not merely sounds forth the characteristic in his presence, she forces it deep into his soul. There is a sound: the soul apprehends it: then it has a word. For the child the tree is the rustler, the wind the sigher, the fountain the murmurer. There lies ready in his soul a little dictionary, awaiting the impress of the organs of speech. But there are some objects which do not make any sound. Where shall we find characteristic words for such? What have color and roundness in common with their names, so that these shall proceed from them as naturally as the word *bleat* does from the sheep? What connection is there between sight and hearing, between color, scent, and sound? Man comes into the world; by what an ocean is he at once encompassed! With what difficulty does he learn to distinguish, to recognize the senses; to use them when once recognized! Sight is the coldest sense, and had it always been as cold, distant, and distinct as it has become for us through the labor and use of many years, I certainly do not see how one could have made audible what he saw. But nature has taken care of that, and has made the way shorter, for sight itself is only touch at first, as children bear witness. Most visible things move; many sound in moving; and where they do not they lie, as it were, nearer to the eye in its primitive condition, and so may be felt of. The sense of touch is allied to that of hearing; its designations, as hard, rough, soft, woolly, velvety, hairy, smooth, sleek, bristly, etc., which have reference only to surfaces, all sound as if one were feeling of the objects. The soul, invaded by such a throng of mingled experiences, feeling the need of creating a word, grasps at and

perhaps obtains the word of an allied sense, whose feeling corresponds with this ; so sensations all become words, even for the coldest sense. The lightning does not sound ; how shall it be expressed—this midnight messenger, ‘which suddenly unveils heaven and earth, and ere a man can say, Behold it! has already vanished into the abyss of darkness?’ Naturally a word arises, which, by the aid of a certain sympathy, gives the sensation of suddenness and swiftness that the eye felt—*lightning!* (German, *Blitz!*) The words scent, tone, sweet, bitter, sour, etc., all sound as if they came from the sense of touch ; for are not all the senses originally touch ? If we feel in the word dawn (German, *Morgenröthe*) some idea of beauty, splendor, and freshness, the traveller in the East feels in the root of this word the first rapid, joyous ray of light, which we perhaps have never seen ; at least, have never felt with the spirit.”

Now, what teacher of the deaf and dumb can seriously maintain that the deaf-mute may be brought by means of articulation—that is, by being taught to express imparted ideas in spoken words—into the condition of hearing children, so as to think in words ? Is it to be expected that the deaf-mute will be able to think in forms which for hearing persons have an inward meaning, but for him have not ? It is impossible. The radical error of this paradoxical claim lies in the mistaken presumption that speech and thought do not always need the connecting link of hearing, or in the erroneous idea that there is no difference between expressing thought in words and thinking in words—things which, instead of being identical, are wholly heterogeneous. What teacher of the deaf and dumb would undertake to prove *a posteriori* that his pupil, from the moment when he learns to express his thoughts in spoken words, also thinks in words, apart from gestures ? Such a wonderful being I have not yet seen ; such a prodigy I should certainly like to see. If the deaf-mute really thought in the forms of our language, as is claimed, he would immediately be restored to the condition of language of the hearing child ; he would be able to speak, waking and dreaming ; he would meditate only in articulate forms ; he would speak, read, and write only by thinking in articulate forms ; moreover, provided he could grasp words directly in the form of articulation, he would already be in the way of securing that more

rapid and surer progress in the acquisition of language which belongs to the hearing child. But what does our daily experience prove? What is every teacher of the deaf-mute taught by his own practice? Unfortunately, the opposite of all that. How the poor creature writhes and twists upon the field of speech before he is able to stand securely and walk steadily! With what pains must the noble food offered his spirit, hungering for language, first be artificially prepared in a peculiar manner, and language be taught him by a peculiar method! And why is all this so? For no other reason than because the pupil, with all his wonderful ability of expressing himself in words, is still very far from thinking for himself in the same form.

We must, then, most earnestly protest against the claim made by the orthodox, or rather by the bigoted, advocates of the German method—for we think its reasonable adherents would rather agree with us—the claim that articulation affords a sufficient and complete means of teaching language to deaf and dumb children.

4. *What means have we within our reach that for the deaf and dumb shall perform the same office, in some degree, that spoken language does for hearing children?*

If the word recommends itself of its own accord, so to speak, to the hearing child, because he naturally thinks in articulating forms, for the deaf-mute child it must be placed in a similar relation to his actual mode of conception and thought. Now, the deaf-mute child thinks only in the language of gestures. For the hearing child it is articulation that is the medium of thought; for the deaf-mute it is gestures. For the former, the word becomes the vehicle of thought through spoken language; for the latter, through the sign-language. Only by thinking in gestures does the deaf-mute learn to speak, (read and write,) as it is only by means of articulation that the hearing child learns to speak, read, and write. But articulation has this advantage over the sign-language, that it makes the word the direct expres-

sion of the thought ; while the sign-language causes the deaf-mute to conceive of the word rather as the sign of the gesture-sign. Indeed, the deaf-mute is compelled by his peculiar circumstances to conceive of the word as the sign of his gesture before it can become for him a direct sign of the idea, just as the hearing child can conceive of the word only as the sign of his vocal language. For the deaf-mute, therefore, the sign-language must take the place of spoken language ; it is the surrogate of spoken language in the strict sense of the word. If it does not perform all the office that spoken language does for the hearing child, yet it accomplishes that which is most essential and important—it enables the child to learn to know the word as the form for the expression of thought. It is the first thing that opens to the deaf-mute the gate of language. If it did no more than this, it would still have rendered a great service.

We see everywhere that the deaf-mute cannot form or develop the least thought in words without having recourse to the sign-language ; that even when he knows how to speak or write, he still continually thinks in gestures. If the teacher observes nothing at all of this, he must be totally blind ; for the pupil must make gestures in his mind or with his feet, if he is not allowed to do so with his hands. Though the teacher faithfully communicates with the pupil only in spoken words and not in gestures, yet the latter will adapt his own signs, of which he has a thousand at his command, to the words, in order to be able to think ; that is, to represent to himself the things that are spoken of. Hearing persons proceed in the same way. When they speak, read, or write, they carry on a colloquy with themselves in the mind, either aloud or silently. The deaf-mute cannot form the least word without the intervention of signs, just as the hearing person cannot without the aid of articulate forms. Nature, then, commands us to allow the deaf-mute his signs, so long as he does not think in words, just as a skilful teacher permits his hearing pupils who have not yet acquired much knowledge of the abstract meaning of words to speak and think in their own way. Moreover, how *can*

we banish the deaf-mute's own language when he is learning words, since in that lies the only possibility of his thinking at the same time? It would be doing violence to nature if the intervention of signs were nowhere allowed; it would be demanding an impossibility of the pupil if he were required to speak upon the basis of articulation only; it would be prescribing to nature laws of development which she would not obey; and if, notwithstanding this, human art by some miracle should succeed in producing results, a prudent man could not but regard a development of this kind as a hot-house education, and he would warn us most earnestly against it, as likely to interfere with the real intellectual advantage of the poor children.

We agree, then, with all the moderate, reasonable adherents of the German method, as well as the representatives of the French method, that the sign-language must be made the basis of deaf-mute instruction, just as spoken language is the basis of the development of language for hearing children.

5. Has the sign-language only the limited value of articulation, or does its influence in respect to the acquisition of language extend still farther?

The value of the sign-language consists not only in the fact that by means of it the deaf-mute pupil learns to comprehend and use the word as the sign of the idea, or as a form of the expression of thought, but also in introducing him into a knowledge of the interior constitution of language. It stands midway between the sign and the thing signified, or between the word and the thought, and makes known to the pupil what is meant by this or that expression of language. But while it discloses to him the actual relation between speech and thought, it also gives him a more or less clear idea of the fundamental principles of language. If the deaf-mute thinks rightly when relying upon the sure testimony of gestures; if he knows how to form ideas, judgments, and conclusions which shall be logically

correct, it is not easy to see why he cannot and must not derive therefrom the abstract forms of language. So the sign-language, since it discloses to the pupil the relation of thought that lies at the basis of language, is a reflector, in which he can behold for himself and learn to comprehend the phenomena of language. It is true that the form of the sign-language is quite different from that of word-language, as the former renders thoughts only in a concrete form, or in pictures, and not in an abstract form; but it is the only means by which an understanding of language can be imparted, since the pupil cannot be reached by mere words until the sign-language has made him in some degree familiar with them. The fact, therefore, that the sign-language is different from word-language, and heterogeneous, is no reason why it should be banished from the course of instruction. The sign-language is not literally translatable, and does not serve in the capacity of a translator, but rather as an indispensable interpreter of the substance of language. It furnishes the thoughts which are prerequisite for the creation or comprehension of words and forms, though it may not render the same service that one language renders to another. Moreover, though the sign-language does not need a name or a sign for every word, every form, and every expression, it is able, when skilfully employed, to untie the hardest knots of language.

As in general the intellectual capacities are cultivated and developed by means of real objects, so the deaf-mute's power of language can be cultivated and developed only by the realities of the language in which he first manifests his intellectual being, and in which he speaks and thinks. As the picture is the basis of the mental image, the intuition of the conception and the concrete of the abstract, so is the sign-language of word-language. The picture cannot be separated from the image nor the thought from its expression without destroying the faculty of speech or language; as little can the sign-language, in which the deaf-mute first thinks and speaks, be taken from him, if he is not to form all his ideas at random.

Whoever, then, rejects or ignores the sign-language as the basis upon which the pupil must first learn our language, rejects at the same time the conditions upon which the development of his power of language must depend, and inevitably falls into the danger of teaching language to the deaf-mute abstractly, and therefore in a manner which is extremely unfruitful, and, I may add, injurious to the mind. As it is the general law of mental development that the unknown shall be joined to the known, the distant to the near, the rational to the empirical; as in general the native language is made the basis for the acquisition of a foreign language, so no more natural method can be devised for the instruction of the deaf-mute in language than that of joining the thread which is to be spun directly to the sign-language. Language, like thought, can be made living, active, and fruitful only through the living breath of the native language. If the education of the deaf and dumb is to develop them for knowledge and power, not mechanically and narrowly, but intellectually and broadly, there can be *no other way of breaking the path of instruction in language than through the sign-language.*

6. *Do all the advocates or adherents of the German method really believe that articulation affords a means of instruction so infallible as to make the sign-language wholly superfluous?*

Even among those who maintain with all emphasis and with great tenacity the fundamental principle of the German method—viz., that deaf-mute children should be taught to speak, write, and read only by the way of articulation—there is great diversity of opinions and views as to whether the sign-language should be used in the application of this principle, and if so, how far. While the majority of them meet us with the frank confession, honorable alike to their character and their science, that the German method cannot wholly dispense with the aid and co-operation of the sign-language, we find on the other hand not a small num-

ber of Philistines who expect healthful intellectual development only from an unconditional and absolute adherence to their principle. Let us leave these opponents, who care less for the natural law of development than for the consistency of their method, and who seem devoted to the service of a theory; let us rather hear those men who are capable of taking a broader view of the question.

Dr. Neumann, director of the Königsberg Institution for the Deaf and Dumb, a most intelligent teacher, whose too early death we lament, says in his very instructive paper upon the Paris Institution:*

“No judicious teacher will wish to banish signs from his method of instruction. It is, and must remain, the chief element in which the education of the deaf-mute begins. His world of signs is his intellectual home. In the first years of his instruction our words are still foreign, dead signs for him, which he accepts and uses only because and when necessity compels: as soon as this is removed he prefers to use the language in which he has thought and felt since his consciousness first awoke. But as he receives written signs and sees the circle of his conceptions and ideas widen, he begins to like this new language which brings him so much. The word-signs then become the supporters and vehicles of the new ideas received, or the old ideas enlarged: the deaf-mute begins to think in the language of words. The method of instruction that accomplishes this result is the true one, and this is the touchstone by which every method should be tried.”

Heinicke's son-in-law and immediate successor, Dr. Reich, formerly director of the Leipsic Institution, though enthusiastically devoted to the German method, confesses with German frankness:

“Since the mind cannot think without signs, and the signs of language, though the most perfect, are too difficult for the deaf and dumb at the beginning of their education, and not adapted to their manner of thinking nor their unpractised organs of speech, pains should be taken to improve the language of signs: the pupils should be taught to describe in signs whatever they perceive in an object—all kinds of actions, effects, relations, and circumstances.”

Dr. Jaeger, well-known and universally esteemed for

* “Die Taubstummenanstalt zu Paris im Jahre 1822,” page 27.

his clear and valuable writings upon deaf-mute education, says :

“Upon the sign-language the teacher must build all the future education of the deaf-mute. But though he begins with this, it is his purpose gradually to make it superfluous. [A pithy remark, deserving of attention.] Sound and writing are necessary for the deaf-mute, although for him sound can never really be sound.”

Likewise must the words of his successor in office, Dr. Wagner, the present director of the Gmünd Institution, an impartial judge, be believed, when, as president of the Esslingen convention of instructors of the deaf and dumb, he opposed the extravagances and excesses of certain members of the convention :

“The sign-language is indispensable as a means of introducing deaf-mutes into the language of words, and of ascertaining the intellectual power of the pupils when they first enter the institution. I would have the sign-language a substitute for spoken language as long as the pupil is not able to express himself [and I might add, to think] in the latter. As for the claim that in the instruction of the deaf and dumb the pupil's lost sense must first be restored to him, and then he must be taught like a hearing person—that is more easily said than done; it is, and always will be, necessary to follow a peculiar method of instruction, *because the deaf-mute does not hear.*”*

Counsellor Saegert, formerly a teacher of the deaf and dumb, now inspector-general of the Prussian institutions, also advocates the use of the sign-language. Mr. Büscher, in the fourth report of the Cologne Institution, 1838, says :

“He [Mr. Saegert] always insists upon the sparing use of the sign-language, but regards its entire exclusion as impossible. Instruction presupposes a means of mutual understanding between teacher and pupil, and at the beginning of the course this can be found only in gestures. By no other means can the teacher form the often-neglected heart of his pupil, designate good and evil as such, encourage the industrious, stimulate the idle to activity—in short, exercise a moral and intellectual influence upon the deaf-mute. Yet he regards the sign-language merely as a means for solving the chief problem, which is, to

* Organ der Taubstummen und Blinden-Anstalten Deutschlands, von Dr. Matthias, vol. xi. page 122.

communicate word-language to the pupil. [How well this describes the whole course of instruction by the natural method!] The chief office of gestures is to express the ideas and perceptions of which the senses take cognizance: but signs for ideas and perceptions of another kind, especially when an obvious point of resemblance between the object represented and the sign can be found, are not to be wholly excluded, and even conventional signs may have their place. [This shows how the natural language of signs may be improved without overstepping its proper limits.] The development of an artificial sign-language is unnecessary, since the natural sign-language reaches the limits allowed, and would, moreover, have the disadvantage of interfering with the assimilation of word-language. Where the latter can serve as the medium of communication in giving instruction the teacher should neither employ signs nor allow his pupils to employ them, and they should gradually fall into disuse, even as a means of instruction."

The experienced Dr. Gronewald, formerly director of the Cologne Institution, says:

"Pantomime, being the first point of contact and union in the instruction of the deaf-mute, is the only possible way of making him a partaker in the culture of the human race. The deaf and dumb child is naturally directed to pantomime as his native language, and in his whole life cannot, and will not, entirely dispense with it. Our institution does not fall into the delusion of attempting wholly to exclude signs. It gladly takes them into service, since they are indispensable to it. Intellectually dead, a walking statue, would the poor deaf-mute be, and remain, if by any possibility the idea of robbing him of the sign-language could be carried into execution."

Alexander Venus, director of the Imperial Royal Institution of Vienna, expresses himself yet more explicitly and directly:

"The hearing person comprehends through the organ of hearing; through hearing he thinks in sound. Not so the deaf-mute, who lacks the two most important means of culture—hearing and speech. The deaf-mute comprehends through the eye; he cannot possibly think, like the hearing person, in sounds; he thinks in forms, signs, images, and thus there must be formed within him a method of thinking entirely different from that of the hearing person. Spoken language, being inaccessible to the senses of the deaf-mute, is and must remain for him a foreign language. These are facts which no one can dispute. If, then, sounds are the way in which the hearing person, who comprehends through hearing, comes into the possession of language, it follows that for the deaf-mute, who comprehends through the

sight, this must be the medium through which he attains to writing and articulation; and this intellectual bridge is the sign-language."

At the conference of German teachers of the deaf and dumb, held at Esslingen in 1846, the proposition of one of the members of the conference, "to banish the sign-language from the course of instruction," was wholly rejected, on the ground that it had already been demonstrated by the experiments of a certain candidate of theology in Berlin that the pupils thus taught, though they acquired readiness in speech and lip-reading, were without the least comprehension of language, even in simple sentences. It was maintained that, by the suppression of pantomime, the course of instruction was rendered long and difficult, the intellectual development was hindered, the child was shut up within himself, education and culture were limited. In short, violence was done to nature; it was an unnatural, impossible, fruitless proceeding.

If there are still persons who advocate the unconditional and exclusive use of articulation in teaching the deaf and dumb, they must, for the most part, be those who, despite long years of practice, still remain strangers to their pupils. Being unfamiliar with the results of the experience of so many men of the profession, they easily become enamored of the general principles of education; and, carried away by this pedantic delusion, think nothing is easier than to free the art of deaf-mute instruction from forms which they regard as antiquated and outgrown. Examined carefully, all such novelties are seen to be only the remains of the well-meant, but wholly mistaken, efforts of Graser, Stephani, Daniel, Arrowsmith, and others, to make the science of instructing the deaf and dumb the common property of the public schools, and must inevitably, sooner or later, share the fate of those educational devices. Certainly there is still room for meritorious service. The merit of clearing the field of weeds is not less than that of cultivating it; but let us take care not to pull up the grain at the same time with the weeds. No one can blame the effort to simplify

the method of teaching the deaf and dumb, or the attempt to reduce it, as much as possible, to the footing of general instruction. But let us not be angry with the Lord of nature when he says to us, Thus far and no farther! True science stands in close alliance with nature. It is only presumption or childish caprice that will endeavor to break through the barriers prescribed by nature to the course of instruction. By such unworthy trifling the deaf-mute is more likely to be educated into a prodigy than into true manhood.

7. Does the sign-language, as such, deserve to be cultivated or not?

If it be granted that the sign-language is chosen by nature for the purpose, or, if I may so express myself, has the monopoly, of conducting the deaf-mute into the realm of language, the question whether it deserves to be cultivated must be regarded as superfluous. The better the means by which we seek to reach an end, the better will it perform its task. Must not the sign-language, whose first duty is to develop the thought, knowledge, and power of the pupil, render the better service to instruction, the greater the variety of notions, conceptions, and ideas which it is able to provide? The more intelligibly the teacher speaks to the scholar, the more vividly he is able to express the form of a judgment, an opinion, an idea, a conclusion, a doubt, a belief, an activity, a condition, a purpose, etc., the more clearly will the scholar learn to comprehend the forms of language; while mere words allow the deaf-mute who is still unskilled in abstract thought to see these forms only through a glass, darkly. Where the teacher does not come to the aid of the pupil with an explanation, the pupil receives from words nothing but casual, confused ideas, which cannot be corrected without great skill and tact on the part of the teacher, and then only by persistent effort and ever-repeated, wearisome questions. It is by no means to be presumed or expected of the pupil when phenomena and facts are presented to him, or he himself is made to utter

them, that he will immediately draw therefrom a correct conclusion as to the meaning or force of the words; on the contrary, it may be laid down as a general rule that the expressions of language must be analyzed for him in addition. What a saving of time it is, then, and how much more quickly the pupil arrives at the goal, when the exercise is explained to him by means of a skilful pantomimic representation! The sign-language renders excellent service, especially in the development of ideas, which it is often scarcely possible for the teacher to convey in words. Moreover, the pupil early and rapidly obtains through the sign-language all kinds of knowledge, for which words would compel him to wait long—very long. Inasmuch as *all* pupils are not endowed with such readiness in language as to grasp everything directly in and through words, these unfortunate children, if deprived of the sign-language, are exposed to the danger of having to leave school poor in general knowledge, lacking in notions, conceptions, and ideas, and, what is worse, of being compelled to remain very ignorant in a moral and religious point of view. The greatest facility in speech and language is not conclusive proof of the pupil's real comprehension, if he is not at the same time able to render an explanation in gestures.

For instance, there are the Bible histories, which cannot be presented to the young too early. Must we postpone them until the pupils acquire facility in language? To be sure, the attempt is made here and there to remedy this grave defect of the method to a certain extent, by presenting the most important historical points of religious instruction in short, simple sentences; but of what profit to the children are these barren words, single, disconnected events, and measured, forced forms of expression? Those living scenes of the history, which in themselves are so interesting and profitable to the unprejudiced minds of childhood, cannot be depicted or represented by such an unnatural and superficial treatment. Either let the pupil receive them from the teacher in the free form of his native language, or let him wait until he has acquired the ability to read in our

language. Any other method is injurious. Only by a vivid description of events, either in words or in gestures, can the pupil enter into the spirit of the history, and, as it were, live in it; otherwise, his knowledge will be limited to lifeless, barren facts. I wish my readers could have been present at a lecture in signs by the late Mr. Frost; he had the power of so transporting the children into the fields of history that they seemed actually to witness the events. I have seen one of his pupils, a little Jewish boy, who had been in the institution scarcely a year, relate in his own natural language the whole history of Moses, with expression, vivacity, grace, and dignity.

But let us not be misunderstood. When we say that we desire the cultivation of the sign-language, we do not mean that we wish it to be formed after the genius or model of spoken language, so as to render not merely the meaning but the very forms and equivalents of words; but only that it should be adapted to express the sense of the spoken thought readily and clearly. It is not to be asked of the sign-language, which is descriptive in its character, that it shall attain to the peculiar force of word-language, that is, its more ideal or verbal force, or that it shall give an insight into the proper combination of words or the construction of sentences; but, by discovering to the pupil the substance of the words, it contributes, though it may be only indirectly, to an understanding of them. If the sign-language succeeds in conveying to the pupil a clear idea of what the words contain, it will be easy for him to fill up the gaps in his comprehension through the words themselves.

If, then, the sign-language is a useful and important auxiliary in imparting instruction, no teacher of deaf-mutes can properly dispense with it; on the contrary, it is the sacred duty of our profession to acquire the requisite skill in the use of pantomime, though this acquisition may be no easy thing. Let the teacher remember that the instruction is for the benefit of the children—not of himself.

It is scarcely necessary to remind the reader that in the development of the sign-language it is not essential to have

signs for every word and its construction, but only so many signs as are needed to express the substance of the words. For instance, if I wish to say to my pupils, "The clouds hide the sun from us," I only need to describe the appearance of nature, without troubling myself about a sign for the word "hide;" for I may presume that if the pupil has comprehended the idea of the word he will express it by the proper word-sign. Of what use is it to construct methodical signs, or rather signs corresponding to words, when the word-signs themselves are equally at the pupil's command and answer the same purpose?

8. *What is to be thought of the objection of those who maintain that instead of allowing the sign-language to intervene we should attach the expression of the idea directly to the word?*

What, is it possible that we would not allow the deaf-mute to think, like the hearing child, directly in words? Can we be ignorant of how much greater results would be accomplished by words than by signs, and how much more rapidly and surely the pupil would be led to these results? Why, then, do we not choose the way that would lead most quickly and certainly to the goal? Why do we not prefer this way to one which is far more uneven, which is full of hills and mountains, swamps and morasses? Why do we choose to cultivate a field which in spite of all our labor and pains produces such slender fruits? Are we not guilty of folly in rejecting a course that brings good fortune and blessing, and promises gold and silver? Why, in short, do we not teach our pupils to speak, rather than to make signs?

Alas! we know very well that speech, not signs or gestures, is the nearest, most direct, and immediate way to speech, (writing and reading,) and therefore we lament the more that it is not in our power to satisfy this very just demand. We do not believe, and we never can believe, that this way, although the most natural for others, is also open to the deaf-mute. For him, if not wholly closed, it is at

least obstructed ; he has not, like hearing persons, a natural capacity for speech, but must first be made capable of it. In order to make him in some degree capable of it, two entirely different methods are offered : we may either use constraint, or we may open the way to speech through gestures. But what is it to use constraint ? It is nothing else than to do violence to nature ; it is to enter with the pupil upon a course different from that which nature desires, and which she has expressly prescribed. Spoken language is proposed instead of the sign-language. But is it doing well—is it acting wisely—to employ a method different from that which nature has designed for this very purpose ? Is it proper for education to engage in such a struggle against nature ? Can education accomplish anything without the co-operation and assistance of nature ? To educate, is, properly speaking, to assist nature to educate and develop ; it is to enable her to reach the end which she has in view with regard to men. For the deaf-mute education is, it is true, a process of *healing* ; but the healing can be performed with the aid of nature. Even if we could accomplish anything while acting in disregard of nature's laws, surely that would not be true culture ; it would be false culture. Who would be wiser than the Creator ? Who would forestall the plan of education which God of his good purpose has provided for the deaf-mute ? What else can we expect of a false philosophy than the sacrifice of the well-being of the child entrusted to us ? Would this education and culture of our own devising be sound ? Would not the child's disposition, as well as his misguided intellect, receive a serious injury ? Can that be a wise education which wholly denies the deaf-mute's nature—which completely ignores deaf-muteness in the deaf-mute ? We are like the busy Martha ; we give ourselves much care and trouble, and forget the one thing needful—a sound humanity, which we should strive for above all other things.

We consider it unworthy of us, as teachers and civilizers, ever to do violence to that nature in whose service we are enlisted. We take this ground the more firmly, since an-

other way is open to us. It is the peculiar lot of the deaf-mute that he cannot walk in the road which thousands about him travel, unless a peculiar staff is provided for him to lean upon. This staff, so indispensable to him in walking and moving, is his language of signs. What is speech? Speech is the formation of words. But the deaf-mute, since he does not hear, learns words by being spoken to, not with the voice, but by gestures. So it is through gestures that he must first be made capable of speech.

True, this way, being circuitous, is very long; true, it is rough, inconvenient, and difficult. But slow as it is, there is no more direct or better way; none which leads more surely to the desired end. The apparently short and rapid way, since it departs from nature, departs from its proper aim; it is the wrong way, and we must avoid it. Nothing remains for us but to take the longer course. We deem it better to provide for the immediate present want of the pupil than artificially to create a new want, which might with advantage to him have slumbered longer. How can any one be so hard-hearted and cruel as to demand of him that he shall stand, walk, and run upon his own feet while he is still partly crippled? Who would give an infant solid food and drink before it has yet learned to suck? Who would artificially create hunger and thirst in the child before they manifest themselves? Does any one really believe that nature can be guilty of negligence?

9. *What is to be thought of the opinion of those who maintain that the sign-language is a hindrance to the pupil in the development of spoken language?*

Even among professional teachers of the deaf and dumb there are, strange to say, some persons who fear that the sign-language, the instrument which is employed to open to the deaf-mute the sanctuary of language, will place a barrier to the further progress of the mind. For this reason they earnestly oppose its use.

But is this suspicious mistrust of the provisions of nature,

or rather of the gift of God, a delusion on our part, or does nature really make sport of us? Who believes nature capable of such an outrage upon the deaf-mute as to make his intellectual development dependent upon conditions which must eventually ruin it? Does she really play upon him such a cunningly-devised trick as this? No. The treachery of which they say that nature is guilty is nothing but the delusion of her accusers and opposers. Nature, being from God, is wholly good, benevolent, wise, and God-like, and contradicts herself just as little as God contradicts himself. Let us understand the hints of nature, and we shall admire her wisdom, or rather the wisdom of the Creator, and shall be more gentle and just, more considerate and indulgent, toward the children whom we teach.

What, then, does nature wish of the sign-language? She wishes it to break the path to the development of spoken language, and to assist in imparting it; nothing more. The sign-language claims to lay the foundation of word-language, not to perfect it. It aids in the creation of words, and leaves the complete development and incorporation of language to a more special instruction in language. It does not interfere with the essence of language, and exerts no further influence upon it than to call it into life and existence. Not the least beginning can be made with words without the assistance of gestures. Therefore it happens that many teachers who theoretically wish to know nothing at all of the sign-language recall it from its banishment upon the first effort to give instruction in language. Therefore, also, other teachers are compelled to confess that the sign-language cannot be wholly dispensed with, though they make it an unalterable rule that it should be dispensed with as much as possible. Thus the sign-language stands in good credit in all *schools*, though not in all *books*.

How can pantomime be injurious when used upon this simple, unpretending, and modest basis? How can the real logical principles of language, which it represents, be injurious to the formal principles of language? How can the logical thinking of deaf-mute children interfere with the

development of their language when they think just as correctly as other children? If, notwithstanding this, there is ground for the complaints made against the sign-language that it attacks word-language and engages it in a life and death struggle, it is because the minimum limit of the sign-language, determined by nature, has been presumptuously overstepped, and the domain of word-language has been encroached upon. There are, unfortunately, many teachers so weak in the sign-language that in attempting to use it they combine it with word-language in such a way as to speak in an affected, unnatural fashion of their own, instead of the free, unconstrained manner of the children. Of what use is it for the teacher to appear a puppet-player rather than a real actor? Let it not be supposed that if the teacher explains or interprets a Bible narrative, for instance, in the order and construction of word-language, or in any other distorted form, it will be understood by his pupil. No; the pupil understands nothing of it, or at most he gets only shadow-pictures, and the cloud prevents him from discovering the meaning of the words. If, on the other hand, the teacher expresses himself freely, in the manner of his pupil, not only does the picture of the narrative present itself clearly to his mind, but he also accomplishes more easily and understandingly the task of clothing it in words.

When the sign-language is so unworthily treated as to be made the mere tool of translation or the blind slave of spoken language, as is apt to be the case in schools where articulation flourishes, there is always danger that the instruction in language will degenerate into a mere dead mechanism. The slavish dependence of the sign-language upon the forms of spoken language cannot fail to be injurious. If, through a perversion of their use, the sign-language and word-language are presented to the pupil as identical ideas, the sign-language will draw the word-language after it, and will lead it astray into swamps and morasses. Thus it is often remarked that the written language of the deaf, and dumb is less a free product of the mind than a mere imitation or echo of the sign-language.

In teaching language, signs must be used independently, not artificially. According to the manner in which the sign-language is used will the education of the pupils be more or less easy. If the teacher always aims steadily at the minimum of the sign-language, freer space will be left for the acquisition of word-language. If he refrains from creating signs for words and forms, and limits himself to giving in signs merely the idea, justice will be done to word-language, and the latter will perform its part with less constraint. But if the pupil clings to the sign-language, and during the first part of his course is continually falling into its monotonous forms, this is entirely in accordance with the nature of things; for he must learn to construct before the word can become the subject of reflection or of closer consideration.

But the teacher has it in his power to counteract the influence of the sign-language with spoken language, and to give the latter the preponderance where it is possible. If, then, the teacher does not succeed in naturalizing the pupil in spoken language, and the sign-language continues to predominate, he must conclude that he himself is to blame. The word will not assume the mastery until it has itself been mastered. If the sign-language obtains a permanent foothold here and there, instead of giving place to the word, it is the fault not only of the disadvantages of this language, but also of the bad method of teaching spoken language. Since the pupil is drawn directly to the sign-language by his own needs, it is certainly better for the teacher to leave it undisturbed, and devote his efforts to increasing the pupil's slight interest in words.

From what has been said it will be evident to everybody how false and untenable is the claim of the opponents of the sign-language, that if this language is once introduced into the course of instruction it will fix itself in the pupil's mind and obtain control over his thought forever, or, as they love to say, will grow into and with his thought. It is a pity that these opponents cannot distinguish the true from the false. It is true, and quite in accordance with the na-

ture of things, that the sign-language will not give up its place while the representative or successor which has been appointed is still in its minority, or unable to assume the role of thought. But it is false, and wholly false, to say that it will not surrender its domain when its own child, which has been brought up by itself with the utmost devotion and self-denial, has finally come to the years of age and discretion. There still dwells in the deaf-mute, undisputed by the sign-language, a special predilection for word-language, since this can better satisfy the higher interests of the mind; and if the pupil is only taught to know and esteem the intrinsic value of word-language aright, the broad domain of the latter, even in the presence of his own sign-language, will be as open to him as to any other child. What detriment has the intervention of the sign-language done to the results of the French method—results which, to say the least, are not at all inferior to those of the German schools?

There is, then, nothing objectionable in the principle of instruction in language by the method of signs. The sign-language is for deaf-mutes *an absolutely necessary bridge*, in order that they may be able to cross over to the land of spoken language; but let us not forget that it is *only* a bridge, and that the teacher must lead his pupils over it with prudence and caution.

10. *When, and to what extent, does the deaf-mute pupil think in words?*

It is a wholly mistaken and false, yet widely extended notion, that the pupil, so far as he can express his ideas in words, or read understandingly, invariably thinks in the same form, viz., in words, as is the case with persons who hear and speak. Against this notion, which doubtless originated with hearing persons, we must here, in the name of the whole deaf-mute world, enter a decided protest.

We willingly grant that foreigners who are beginning to speak a new language may think in the form of that language, for the forms are of the same kind as those in which

they have been accustomed to think, viz., words. With the deaf-mute the case is wholly different. He thinks of the language which he is now learning, not in the same kind of signs, viz., word-signs, but in gestures. He thinks in images, not in abstract forms. In order that he may be able to think in the abstract form of words, he must pass from his own language to word-language. Moreover, he must be able to express himself in word-language with the same readiness and ease that he does in his own language of signs. But how does he conceive of words according to the analogy of the sign-language? Place before him this sentence: "When it rains, the earth becomes wet; but when the sun shines upon it, the earth becomes dry again." According to the analogy of his vernacular he conceives of the language aphoristically, and gathers from it scarcely more than these words: "Rain, earth wet; sun shines, earth dry." Now judge whether the pupil can form a regular thought with these bare, disconnected words. The deaf-mute beginner in language conceives of words in a very fragmentary and incoherent manner, even though—and this is scarcely less than a miracle—he may be able to express himself in complete sentences. Words swim in his brain too confusedly and mistily for him to produce with them regular mental images, (conceptions, notions, thoughts.) To the deaf-mute words are at first an awkward, clumsy machine for thought, which he can learn to control only gradually and through long practice.

It is true that the deaf-mute, like the hearing child, must learn language through usage. But while, for the hearing child, words grow directly from their use, it is the peculiarity of the deaf-mute that he must collect a certain number of words and learn to understand the method of using them before he can fully comprehend them. A considerable time, therefore, must elapse before he can use words with the same readiness, freedom, and self-reliance as the hearing child.

Thought must always keep pace with language. It is no wonder that the hearing child speaks from the first, since

he can think in no other way than in words. If the deaf-mute is to speak (that is, form words) with the same readiness and ease as the hearing child, he must be able to think in the same form, viz., directly in words. Now, since the deaf-mute child does not think in an abstract form, but in his own way, viz., in the concrete form of the sign-language, it follows that he cannot use and employ words like the hearing child, but only in his own way.

The deaf-mute, however, may be made capable of receiving abstract thought, that is, thought in the form of spoken language, even before he has become capable of speech, (writing.) It depends chiefly upon the skill or readiness of the child—who hitherto has thought disconnectedly, that is, in single words—in grasping words in their full connection, their inward relation. Until the child reaches this point he has not the least knowledge of even the simplest sentences. While the hearing child learns to understand words directly in their combined form, this form becomes clear to the deaf-mute child only after he has learned to know and distinguish the various forms of their combination. One of the teacher's chief tasks is to bring one form of language after another before the mind of the pupil, and teach him rightly to understand and use a certain number of phrases, which exercise an important influence upon the construction of language. When the pupil is so naturalized in word-language as to have at his command words and phrases for the formation of thought, and is able to use words with the same freedom and independence as the hearing child, then, and not until then, does he begin to think in words; from that moment does the word become directly the vehicle of his thought.

To sum up, then, we may say that for the deaf-mute, abstract thought, or thought directly in words, depends upon his command of language, and does not—though the preconceived opinions of many teachers lead them to believe so—grow spontaneously from speech, as is the case with hearing children, or instinctively, as the song from the throat of a bird.

11. *What form must be made the unconditional basis of deaf-mute instruction?*

As the method of elementary instruction in general proceeds from the facts and phenomena of the child's nature, and develops his understanding in connection with these; as it naturally joins the thread of instruction in language to the language which the child already possesses, so the instruction of the deaf-mute properly proceeds from the pupil's own intellectual stand-point, and therefore from the sign-language, as the form in which his thought and ideas take shape and in which he is able to comprehend the intellectual. *Speak as you think* is a law of man's intellectual nature; according to which the deaf-mute child can learn to speak (read and write) only by means of gesticulation, this being the form in which he thinks. As the speech of the hearing child is dependent upon articulation, that of the deaf-mute is dependent upon pantomime. Through pantomime he becomes capable of thought; through pantomime, also, he is made capable of instruction. How can any man learn to speak without the assistance of his own language? Since the deaf-mute cannot, like the hearing child, rely upon spoken language, the only reliance left him is the sign-language. As to the hearing child the word is an idea-sign through articulation; to the deaf-mute it can become such through gesticulation. It is really the law of nature that the deaf-mute shall first learn to understand the word as a sign of the gesture-sign before it can become to him a direct sign of the idea which it represents. We invariably find that the deaf and dumb cannot articulate or spell without gesticulating in their minds.

The deaf-mute, then, can learn language by means of the sign-language, as the hearing person by means of articulation. Granted that the sign-language is and must remain a very poor ladder of instruction, since it but imperfectly fulfils the high mission of articulation; yet it is and must remain the ladder by which the deaf-mute can ascend into the regions of language.

From all this it follows that no more natural method of instructing the deaf and dumb can be devised than that which is based upon the language of pantomime.

This principle of instruction, long recognized and adopted by the French method, should not, must not, cannot be ignored by the German method; for the latter, after all its experiments, is not able to prove by facts that deaf-mute children can be taught to speak without abundant aid from the sign-language. Speech, if it is to be a thought, and not a mere play with words, must be built upon and introduced by gesture. What spoken language is for hearing persons the sign-language is for deaf-mutes. For them it *represents* spoken language in the exact sense of the word; its province is to solve the first problems of their elementary instruction in language. It is the heart, the centre, the focus, the alpha and omega of deaf-mute instruction; the teacher must either resort to this, or must bestow language upon his pupils by act of creation: there is no third course.

12. *What is the true fundamental and permanent form of instruction?*

Though we are agreed that the sign-language is the *basis* of instruction, it does not therefore follow that this must also be the *form* in which the pupil is to receive the knowledge to be imparted, or that it is the permanent and fundamental form of instruction. The simple task of the sign-language is to communicate ideas, not to fix them. The fixing of ideas, that is, thinking by means of symbols, is the exclusive province of the *word*. True, the deaf-mute can think by means of the sign-language, and can thus learn to recognize and know many things, but only in a very limited form, as is to be expected from the nature of the sign-language. What he knows through the sign-language he must now grasp and make his own *in the form of the word*. It is through the word that his material representation, his concrete thought, can be transformed into the purely intellectual. The word is the most distinctive, the most common,

the original representation of mankind, the most expressive and natural form of thought as such, the real and true knowledge of all things, the absolute intelligence of abstract notions and ideas.

Though the word is something wholly foreign to the deaf-mute, yet he also can fathom it, and make it subject to his mind. Though his ear is closed, so that he does not of himself feel the influence of the word, and consequently cannot be taught in the manner of hearing persons, he can, nevertheless, learn to understand the closer, deeper relation of the word with the thought. Though he thinks by means of the sign-language in images, this being the original form of his thinking faculty, yet there also dwells in him the capacity to conceive of word-signs as signs of ideas, and by means of these to fix his actual notions and ideas.

But only when he knows how to clothe his notions and ideas in words, or to think in the form of our language, are the intrinsic value of his thoughts and the intrinsic worth of his knowledge and ability determined.

Since, then, the word, not the gesture, is the garb in which the deaf-mute is to acquire his notions and ideas and knowledge of every kind, it must be laid down as a fundamental rule of the method of instruction that the pupil shall conceive of what he learns only in the strict form of the word; or, otherwise expressed, that the word, and not the sign-language, shall be the permanent form of instruction.

Here we find the French and German methods in perfect agreement. Though the French method may be guilty of carrying its fundamental principle too far and indulging in the use of the sign-language to excess, yet it insists, not less than the German method, upon the intellectual and rational conception of the word. For this purpose it has recourse to the finger-language, (dactylology,) where the German method employs articulation.

But how is the deaf-mute to learn to conceive of the word only in the form of the word? As the hearing child at first conceives of the word in its articulate form, so our pupil can at first conceive of it only in the form of the gesture-lan-

guage. The hearing child, with the growth of signs, (word-signs,) gradually gives up the concrete articulate form and begins to think in the abstract form of the word; so in the mind of the deaf-mute, as he becomes acquainted with the forms of language, the gesture falls back and the word comes to the front. The word makes its influence felt speedily and powerfully in the case of the hearing child, who has the advantage of continual practice in the use of language; with the deaf-mute it asserts its prerogative slowly and hesitatingly. But the double form in which the deaf-mute is compelled to think during the first stages of his course of instruction can no more prevent the abstract form from finally prevailing than the concrete form prevents it in the case of the hearing child. He can learn to estimate the intrinsic value of words as compared with the sign-language; if he is taught to use words rightly they will be able to maintain their ground, and even to gain the preponderance. The pupil must be allowed to employ this double form of thought until his method of thinking has grown into the purely intellectual form. It is not strange that the deaf-mute has less inclination than the hearing child to use words, since to him they are far more obscure. It is evident, too, that much greater special effort is required to enable him to conceive of the word in its abstract form. If the teacher observes the proper limits of the sign-language; if, when the intervention of pantomime is necessary, he contents himself with giving the simple explanation without specific signs, the pupil will be led to regard more closely the formal side of the word. In every explanation the teacher must let the word speak for itself. As the pupil's knowledge of language increases, speech or writing must be employed more than gesture. The word must receive full justice. In the use of speech or writing the teacher must insist that the pupil shall not express himself in loose accordance with the analogy of the sign-language, but as far as possible in the strict form of words. In reading, the pupil should give the sense of the words in the free manner of his vernacular, and not in the order of spoken

language. His reading should consist, as far as possible, of what does not require a preliminary explanation in signs, in order that he may learn to read silently by himself. He should, therefore, be given reading pieces, for which he has been prepared by previous instruction. The teacher must not be too ready with explanations, but must urge the pupil to find out the sense of the words for himself. To ascertain whether the pupil understands what he has read, he may be questioned upon it orally or in writing, or may be required to translate it freely into his vernacular. If he speaks only aphoristically, in his own language, it is a sure proof that he has not fully understood, and he may be helped with an explanation. When the teacher gives anything to be written out or expressed in sentences, let him confine himself to simply indicating the idea, and not dictate the order or form of the words; at most, let him write on the black-board the words which the pupil would not find out for himself. In giving a narrative history, or description, let him develop only the material or actual part, leaving the pupil to write out the whole in the strict form of words, with such readiness as he may possess in the use of language. So far as circumstances permit, the pupil should write from real life, from pictures, or from conversations previously held.

In general, the word should have the preference; teacher and pupil should speak or write, and the sign-language should be made auxiliary and subordinate. If ignorance of word-language renders the assistance of the sign-language indispensable in the lower classes, in the higher the word must be used with so much the greater strictness and with the more unyielding persistency.

13. *Should the word be received by the pupil in the form of articulation or of writing?*

While it is generally agreed that the word should constitute the permanent form of instruction, and that whatever ideas are to be imparted to the pupil should be fixed and assimilated only by means of the signs of our language,

viz., words or phrases, there is yet a marvellous difference of opinion among teachers of the deaf and dumb as to whether the word should be imparted to the pupil in the form of articulation or exclusively in that of writing. Here the French and German schools stand sharply opposed to each other, the former declaring that writing is a sufficient means of instruction; the latter maintaining that writing can by no means dispense with the aid of articulation.

Though both schools may be able to prove by the facts of actual experience that, notwithstanding the difference of their principles, they have each produced satisfactory results, yet the question whether the two methods are able to stand on equal terms before the tribunal of educational science is one that cannot be avoided.

We assert in the first place, in behalf of deaf-mute education as well as elementary education in general, the principle that the process should be in accordance with nature. For though the instruction of the deaf-mute, on account of the natural disadvantages under which he labors, requires the most complete resources of art, yet this art must always be in alliance with nature if the child is to be really educated, not merely drilled and trained. Let us beware of artificiality, into which the instruction of the deaf and dumb is the more likely to fall from the fact that it is essentially a method of art.

Now, do the French and German methods both follow the course of nature? Yes; the results which they obtain afford convincing proof that they do. But just here, where each method can point with equal justice to its own manner of instruction as natural, though neither will acknowledge this of the other, just here the strife and conflict must be hottest and most difficult to decide.

But the results or achievements of methods so different are not of themselves decisive as to their intrinsic excellence and value; the processes also by which these results have been reached deserve to be considered and examined from the stand-point of educational science, to see whether they are natural or unnatural. What, then, is meant by a natu-

ral process? It is one which not only offers no opposition to the laws of nature, but also allows her a full and free course. Now, which of the two methods can boast that it has acted in complete harmony, as well as in alliance with nature? Which method can say of itself that the pupil instructed in accordance with its plan has acquired his knowledge and power more from inward than outward necessity, more from his own impulse than from compulsion, and without opposition or struggle? One cannot refrain from asking whether there is not in one method or the other—even allowing that they both lead to the same result—something forced, strained, artificial, and, therefore, unnatural; something that may cause the unhappy pupil to use his strength in a manner contrary to nature. Two methods so different must be of different value; one must be true, the other false.

Now, which form of deaf-mute instruction is alone scientifically correct, articulation or writing?

We know, indeed, and everybody knows, that to the deaf-mute, as such, it is just as little natural to express his intellectual activity in the form of articulation as of writing; both are alike dead forms, to which art must first give life. But here we encounter the question, whether the pupil can be rendered capable of receiving the one form in just as natural a manner as the other. What is the course of the two methods in this respect? Both proceed from the correct principle that the pupil is to learn to know and value the alphabet, whether written or spoken, by the appearance of the word, the elements and constituents of which are letters and sounds. If the word means anything to the pupil, if it manifests itself to him as an idea-sign, its elements and constituents must also have some meaning for him.

Though the art of instruction may succeed in leading the deaf-mute to understand and appreciate the forms of language, whether written or spoken, as the vehicles of the ideas indicated thereby, yet we are met by the remarkable phenomenon that the pupil is still very far from thinking in written or spoken words. For him, words are not the immediate signs of ideas, but are dependent upon the media-

tion of gestures. The word cannot become the direct vehicle of his thought until it has become more closely combined with his thought. But how does this take place? It takes place only when the pupil has acquired the power to conceive of the word directly in its form; that is, abstractly. Teachers generally, with the exception of extravagant theorists, rely as little upon the power of articulation as of writing to lead the pupil to associate the word with the thought in his consciousness. This happy result is rather expected from the influence of the word, and in such degree as the pupil has become familiar with the forms of language in which thought is expressed. It is the special aim of the French as well as the German school to place the word as a means of expressing thought at the ready command of the deaf-mute, so that it shall perform the same office for him that it does for the hearing person.

But, it may be asked, can the power of the word be relied upon to render the deaf-mute capable of thinking in one form as well as the other—in the form of writing as well as articulation? Yes; in proportion as the pupil's need of words, which is kindled by his instruction in language, is greater or less, must the impulse to think in words, spoken or written, be stronger or weaker. This is the reason of the remarkable phenomenon that the two methods, in spite of foundation principles differing widely from each other, obtain results so nearly equal.

Since both methods agree in proceeding from the word, and endeavoring thereby to render the pupil capable of thinking in words, neither can be blamed from the standpoint of educational science; on the contrary, each can maintain in its own behalf that its principles are in accordance with nature. In this respect neither can claim superiority over the other.

But we have not yet done. Though we must admit that the deaf-mute, if he has been wisely and well instructed in language, may be impelled by inward necessity to think either in the form of articulation or of writing, yet we cannot escape the question whether the two forms afford equal satisfaction to the inward impulse of the pupil.

Let us consider this question more closely. What is the relation of the word, or language, with thought? This relation must be a double one, not only intellectual or spiritual, but also psychical. The word is the result of the reciprocal relation between the intellectual and psychological, or the physical and psychical organism of the human soul, and the assimilation of the word is chiefly dependent upon the sense of hearing, by means of which the word makes itself known to the soul as the established sign of objects or outward phenomena. The deaf-mute, who cannot hear, is therefore limited to the merely intellectual comprehension of the word, and this may be the reason, and the only one, why words do not readily become the direct vehicles of his thought. For him, if he is to become conscious of the psychical relation of the word, not indeed in the manner of hearing persons, yet in his own manner, the only way that remains is to substitute some other sense for that of hearing. Indeed, it is a wonderful provision of nature that in the absence of one organ of sensation another is the more intensely developed, and becomes capable to a certain degree of producing the sensations, and with them the representations, which properly belong to the sense that is lacking. Think of the blind, how they are able to represent to themselves visible phenomena merely through the power of touch, and of the deaf and dumb, who, by means of the same sense, distinguish, though very imperfectly, the vibrations of sound. Inasmuch as the deaf-mute lacks the sense of speech, viz., hearing, why should not nature come to his aid through the intervention of some other sense?

Now, is it not through the sense of touch that nature supplies the deaf-mute's lack of hearing? When he speaks aloud he can perceive the vibrations produced in his neck, throat, breast, head, etc., and so can feel to a certain extent that the word has some signification. By practice, the sense of touch can be so intensely developed that in the spoken word the object designated thereby will be reflected in his mind, though but obscurely and unconsciously. For touch is the central sense, in which all the experiences of the soul are united and concentrated as in a focus; it enables the

deaf-mute to hear, as it were, in the word, what sort of a condition, property, form of activity or emotion it expresses; whether it indicates something strong or weak, gentle, mild, friendly, shining, soft, smooth, rough, merry or sad, gloomy or cheerful, bitter, sharp, blunt, extraordinary, unusual, surprising, etc. On this subject the author of "The Deaf-Mute in an Uncultivated State,"* himself a deaf-mute, says:

"I was able in my early youth to guess, though but obscurely and remotely, the meaning of many words, merely through the vibrations which speech produced within me. I could thus, if I mistake not, distinguish such words as 'sorrow,' 'love,' 'pleasure,' 'grief,' 'blunt,' 'high,' 'deep,' 'soft,' 'hard,' 'warm,' 'cold,' 'pure,' 'white,' 'black,' 'clear,' 'obscure,' 'dead,' etc. Moreover, I noticed that as my hearing was gradually lost, my inward hearing, viz., touch, became more and more acute, and was almost developed into a sort of outward hearing. This was the case to such a degree that when I read inspired writers I was often completely carried away by them. In reading the epistles, gospels, and prophecies, it happened not seldom that I was profoundly agitated: it seemed to me that I actually heard the holy men themselves speaking. The word of God sounds to me peculiar, majestic, and sublime; it has for me a charm of convincing power such as no other word possesses. Even now I read the writings of St. Paul with the greatest pleasure on account of his forcible style. Foreign languages that I studied made a peculiar impression upon me: I would almost wager that I could discover from them the characteristics of the people who spoke them. The Danish language, as something tender, affecting the mind and heart, discloses to me the cordiality, good nature, sincerity, and honesty, but also the dejection and melancholy of the nation. The French language, surprising, persuading, and misleading the understanding, betrays to me the cheerful but fickle disposition of the French people. Latin is to me the driest kind of food that I know of; it is a dish without salt or vinegar."

Another deaf-mute, who was such from birth, Charles William Teuscher, now deceased, formerly a pupil, and afterwards a teacher in the Leipsic Institution, writes as follows:†

"I confess that articulation is most thoroughly incorporated in my thought. I am able to think only by speaking inwardly, for there exists within me a word-sense, or an inward sense of

* "Der Taubstumme im uncultivirten Zustande," Bremen, 1826.

† In "Blicke auf die Taubstummtenbildung," by M. C. G. Reich, Leipsic, 1828.

hearing ; I only lack the capacity to receive words and modulated tones, like hearing persons, from without. But I perceive very distinctly within me the sounds which I myself produce in speaking aloud, and they are present in my mind even when I think in silence. I believe that in the hearty 'aye ! aye !' there must be an expression of joy amounting to rapture, and the sound is something that elevates the breast. In 'alas !' on the contrary, the soul feels itself cast down. In the words 'lofty,' 'majestic,' 'Arise, my soul !' 'Praise God !' etc., I seem to raise my voice ; but in 'How small is man !' to lower it. In the words 'Oh, what joy !' where the heart is generously expanded and cheered, I believe that the sound is clearer and higher ; but in 'Oh, what grief !' where the soul feels cast down, that it is more sad. I prefer to hear the word 'home' rather than 'birth-place.' 'Fatherland' sounds better to me than 'Saxony,' or 'Prussia.' With the word 'home' the soul associates a certain sweet melancholy, produced by the thought of its transitoriness. I would rather say 'father' and 'mother' than 'parents.' So the feeling of the heart invests words with a certain elevation and depth."

Now, though touch develops a consciousness specifically different from that of hearing, though this consciousness is rather analogous than real and absolute, yet it must be remembered that speech may be produced by any consciousness under provision of which an association can be established between thought and speech. Therefore nature seems to have made thought in and with words, even for the congenital deaf-mute, dependent upon the mediation of spoken language ; one might almost say that speech is just as natural for the deaf-mute as for the hearing person. Moreover, if on various occasions, especially when his feelings are much excited, the deaf-mute utters rude, inarticulate sounds, it should be concluded that he is none the less disposed by nature to express his thoughts also, which in their crudeness are closely allied to feelings, through more regular and articulate sounds.

Though speech chiefly results from hearing, yet it must be regarded as a form of expression corresponding to the psycho-physical organism of the deaf-mute. Though it may not actually produce thought in words, it certainly prepares the way for it.

On the other hand, what has writing or the manual alphabet to do with the word ? Absolutely nothing. The manual alphabet, inasmuch as it produces no emotion in the

soul, is, and must continue, a lifeless thing, which it is contrary to nature for the pupil to employ. And how can written words, which in themselves express nothing at all, in which the sight discovers nothing pictorial or objective—how can these represent the characteristics of objects or definite ideas? As signs of ideas, words, if they are to be not merely conceived of, but actually incorporated into the thought, must correspond to their double relation with the intellectual and psychical organism of the soul; if they do not, they are, and must continue, wholly worthless as guides of thought. Has the written word any image whatever for the sense of sight? The deaf-mute would receive more help from hieroglyphics than from our alphabet-writing.

But though we admit that deaf-mutes may be brought by means of the finger-alphabet to think in the form of writing, yet in this case it is necessity that breaks the ice for them; finger-thinking must still be regarded as an unnatural process in comparison with speech-thinking. And how many pupils are there who really attain to this wonderful result? They certainly form a minority. The great majority are frightened away from it by the enormous mountains of difficulties and hindrances, or, perhaps, by the repugnance of their own healthy natures. Now, what value have knowledge and power for the unhappy children who are compelled to renounce abstract thought, or thought in words? How difficult, how wonderfully difficult must the acquisition of knowledge be without the power of abstract thought! And will not the language thus superficially acquired, and not incorporated into the thought, be effaced with the lapse of time? But granting that deaf-mutes would sooner or later become able to meditate with the fingers, we can properly claim that speaking deaf-mutes would have the advantage over them, for vocal language corresponds to thought in words better, more naturally, and more fitly than finger-language.

If the deaf-mute does not think in the form of spoken language, what other form remains? Only that of the sign-language. But of what use to the pupil is a language steeped

and dyed in the sign-language? With such a limited form of thought as this, can he penetrate into the depths of language and the sciences? Never!

Writing, then, if it is not to hinder or endanger the aim of instruction, cannot dispense with the assistance of articulation; and we must declare that the attempt to teach language to children solely by means of writing and pantomime is *a defective, unnatural, and unscientific process of instruction.*

What reason is there why articulation should be denied a share in the instruction of the deaf and dumb? Let it not be objected that deaf-mutes generally fail to speak agreeably and intelligibly. The benefit conferred upon the deaf-mute by speech is purely intellectual, and consists in the fact that by means of it he comes into possession of the noblest property of the human race, viz., language; in view of this great intellectual advantage we need be little troubled if the deaf-mute does not at the same time attain to an absolute command of the organs of speech. On the other hand, it is evident that the deaf and dumb can carry on intercourse with the world in general more readily by means of articulation and lip-reading than by writing with chalk, pencil, etc. Or is some compassionate, philanthropic heart alarmed at the insufferable contrivances used by the teacher to elicit articulate sounds from the pupil's fettered organs of speech? We also lament that pupils and teachers are obliged to use such means, but this is a matter in which we must choose the least of two evils. What do you say in the case of a child at the point of death, who may be saved by a surgical operation? Do you choose his life or his death? Well, in the case of the unfortunate deaf-mute, do you choose his restoration to sound intellectual health, or his intellectual and moral destruction? Moreover, what advantage over articulating deaf-mutes have those whom you teach to speak and think with the fingers? Is not this wearisome finger-speaking and thinking also a burden and torture for the poor creatures? Does not this thought alarm you?

Or do you wish to weigh the results of the articulation method before you can decide to accept it? But why do

you inquire for results, after it has been found that the principles of the method are scientifically reasonable and correct? Is the method to be blamed, though a hundred unfavorable circumstances occur to retard or prevent its success? Is the method to be blamed, if some of those who practise it are unequal to their great undertaking, or incapable of the sacrifice which it demands?

14. *In what relation does articulation stand to writing and the course of instruction in general?*

We have hitherto recognized it as a fundamental principle that the deaf-mute pupil should fix all his conceptions and ideas by means of language-signs, (words,) and not by means of gesture-signs. But the first act of language-signing is *speech*, and not writing. As the deaf-mute, from the nature of the case, cannot speak without seeing and portraying the letters, or reading, and thus learns to read, write, and speak all at the same time, so here, as always, where reading and writing are aimed at, speech is the key-note, centre, and focus of the course of instruction.

Articulation is the means by which speech first becomes associated with thought, and by which, therefore, writing first obtains its real significance. The pupil must be made to feel through speech that words express thoughts, before he can examine them more closely through writing. Though the acquaintance with words introduced through speech may be the most imperfect in the world, yet it is through speech that the first acquaintance with words must be introduced. When by means of articulation the pupil has once reached the point where, of himself, he becomes conscious of words as containing thoughts, writing takes more hold of the thought, and becomes a conscious, rational act. If the necessary connection between thought and speech—that is, the actual knowledge of words—is lacking, the development of thought takes the direction of the sign-language, and its expression in writing inevitably partakes of all the faults of this language.

Words must be elicited from the pupil through speech,

before they are written. Speech has the priority in point of time, and must always precede writing. First, words; then examination of them.

But though it is natural for the deaf-mute to learn speech before writing, and for writing to be wholly based upon speech, we must, nevertheless, guard against the error of supposing that the deaf-mute, like the hearing person, can learn to speak, write, and read, merely by means of conversation. The hearing child, since he thinks directly in words, is easily able to understand speech. Not so the deaf child, who thinks in pantomime. For him it is a matter of incomparably greater difficulty to understand what the teacher says to him or he himself utters. In speech, he can, at most, feel, not hear, the words, and he receives from them a partial, incomplete, and incorrect idea. The speech taught him is of less importance in itself than in solving for him the problem of language. It should, therefore, be imparted methodically, and in accordance with the law by which the capacity for language is developed. What speech teaches the hearing child in the confusion and chaos of words that are spoken in his hearing must be presented to the deaf-mute in a regular series of ideas, which shall produce, explain, complete, and support one another. The speech of the deaf-mute pupil, in brief, assumes the character of instruction in language.

Speech stands in an inseverable connection with *writing*, which forms the chief part of the course of instruction in language. Speech permits the deaf-mute to express only what he represents to himself at the moment of utterance, without paying the least regard to the manner of representation, which lies at the foundation of expression. When he is made to speak, he reproduces only such words as the moment suggests; but when he is made to write he directs his attention more to the forms of expression and weighs them more carefully. In reading from the lips he catches the words superficially and imperfectly, but in reading books he pays regard to the connection and collocation of the words in order to be able to understand what he reads. While, then, the hearing child comprehends materially and formally at

the same time, since he thinks only in words, in the case of the deaf-mute the formal conception is reserved for writing. The hearing child can arrive at the expression of thought through speech alone; the deaf-mute is dependent upon writing.

It is only when the material and formal sides of speech, or speech and writing, are not separated, that the word combines with the thought, and the deaf-mute can be made capable of thinking in speech when he reads or writes.

But the chief task of the course of instruction is, and must always be, the special formal development of the pupil's notions of language, as it is upon this that the influence of speech depends. Speech combines more or less easily with thought in proportion to the pupil's knowledge of the forms of language. In a school for the deaf and dumb, therefore, much more attention is given to writing and reading than in an ordinary school.

The relation of articulation to writing is this: writing must be chiefly based upon speech, and not the reverse; its task is only to complete what speech has already begun. As the pupil's speech, however, has not within itself the power of developing language directly, but must derive this power from writing, evidently it must stand in a close organic relation with the latter, and must anticipate more or less its form of development.

15. *What, finally, is the true, natural, and successful method of teaching the deaf and dumb, or in what does the real essence of the German method consist?*

One of the most important, but also most difficult, tasks of deaf-mute instruction is undeniably that of preparing the children to think, or develop and express their thoughts, in the form of our language; for only when this point is reached are they ripe for abstract ideas and the conception of abstract truths; only then is the fountain of all knowledge accessible to them, and the great book of life, the Bible, opened. But deaf-mute instruction, like that of mankind in general, can attain to this grand result only in the

service of nature; only when, instead of contenting itself with abstract theories, it holds fast to the established realities and undeniable phenomena of the human nature of the deaf and dumb, and attempts less to explain the forms of their intellectual development according to a preconceived system than to follow the course prescribed by nature.

Since the secret of the unfolding and development of the intellectual life of the deaf and dumb is found in the *sign-language*, this constitutes the elementary principle of instruction—the source from which the first attempts at education must proceed; the foundation upon which the temple of knowledge and language must be built. Through the mediation of the sign-language—for what other way is there?—the deaf-mute gains acquaintance with words, and in proportion to the readiness acquired in the use of language the word becomes more or less the prevailing form of thought. But the word combines with the thought easily or with difficulty, speedily or tardily, according as it is grasped in the form of articulation or of writing. The deaf-mute becomes conscious of spoken words as an expression of thought sooner and more readily than of written words; hence the word must be based upon *articulation*, and not upon writing. But though articulation constitutes the basis of the pupil's comprehension of language, it does not follow that it must be the sole and exclusive guide of the course of instruction, for it leaves many gaps which can be filled only by the co-operation and mediation of *writing*. Speech and writing, then, must go hand in hand.

While articulation remains the chief factor of the course of instruction, it must avail itself of all the power of development which belongs to writing.

The real essence of deaf-mute instruction, therefore, consists in this: that articulation constitutes the fundamental and permanent form of the whole course, while it is supported on the one hand by the sign-language, in which it has its source and root as a reality of the pupil's intellectual activity, and on the other by writing, with which it unites and combines as a fundamental condition of the comprehension of language.

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OF THE
DEAF AND DUMB,

EDITED BY

EDWARD A. FAY,

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E. M. GALLAUDET, OF WASHINGTON, E. C. STONE, OF
CONNECTICUT, I. L. PEET, OF NEW YORK,
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CONTENTS.

NUMBER I.

	PAGE.
The Sign-Language, ... By B. D. PETTENGILL,	1
The Methods of Deaf-Mute Education, . . . By G. O. FAY, M. A.,	13
The Sign-Language in Primitive Times, . . . By RÉMI VALADE,	27
What Influence has Teaching the Deaf and Dumb upon the Teacher Himself? By W. A. COCHRANE, M. A.,	41
A Deaf and Dumb Service, ... From FRASER'S MAGAZINE,	50
NOTICES OF PUBLICATIONS: Turnbull's Manual of the Diseases of the Ear; Keep's School Stories; Baker's Articulation for the Deaf and Dumb; Hutton's Course of Religious Instruction, Part III, ... By the Editor,	58
MISCELLANEOUS: The Michigan Conference of Principals; The Vienna Exposition; American Institutions for the Deaf and Dumb, January 1, 1873; The Tabular Statement of the Institutions, By the Editor.	64

NUMBER II.

MEMORIAL OF HARVEY PRINDLE PEET, PH. D., LL. D.:	
Preface, ... By the Editor,	69
Biographical Sketch, ... By JOHN R. BURNET, M. A.,	70
Reminiscences: I, ... By D. E. BARTLETT, M. A.,	92
II, ... By B. M. FAY, M. A.,	97
III, ... By A. L. CHAPIN, D. D., LL. D.,	100
IV, ... By THOMAS GALLAUDET, D. D.,	103
V, ... By WARRING WILKINSON, M. A.,	105
VI, ... By BENJAMIN TALBOT, M. A.,	110
VII, ... By E. M. GALLAUDET, PH. D., LL. D.,	112
The Last Birthday, ... By MRS. MARY TOLES PEET,	115
Resolutions, ...	116
Dr. Peet's Portrait, ... By the Editor,	121
MISCELLANEOUS: Recent Articles relating to the Deaf and Dumb:	
The Combined Method; Mr. Hancock on Articulation and Day Schools; Visible Speech; Whipple's Natural Alphabet; Amusements; Church Mission to Deaf-Mutes; The Census of Ireland; The Ontario Institution; St. Mary's Institution; The Vienna Exposition; Reports Received, ... By the Editor,	122

NUMBER III.

A SUMMARY OF THE RECORDED RESEARCHES AND OPINIONS OF H. P. PEET, PH. D., LL. D.—I: Introduction; Physiological and Statistical Investigations; Causes of Deafness, Congenital and Adventitious; Curè of Deafness; Physical Accompaniments; Condition of the Uneducated; Innate Religious Ideas; Origin of Articulate Language; Gestures a Natural and Complete Language, and the Only Natural Language of the Deaf; Per- sonal History; Investigation of Articulation, and Conclusions

regarding it; Articulating Day-Schools—Contrast between the Deaf and Dumb and the Blind; The Method of Usage, especially in Common Schools: The Language of Signs the Best Means of Development; Elements, Dictionary, and Syntax of Signs; Use of Methodical Signs; Discussion with Mr. Jacobs.	
By HENRY WINTER SYLE, M. A.,	133
How Not To Do It,	163
INSTITUTION REPORTS: The Census of 1870; Causes of Deafness: Age when Deafness Occurred; Consanguinity of Deaf-Mutes; Consanguinity of Parents; Nationality of Pupils; How shall the Uneducated Deaf and Dumb be Reached? Free Education to All; Age of Admission; Term of Instruction; Size of Institutions; Dormitory Arrangements; The Use of Signs; Articulation; Mechanical Instruction; Michigan Conference of Principals,	By the Editor, 168
“Deaf-Mute” Conventions, Associations, and Newspapers,	
By E. M. GALLAUDET, PH. D., LL. D.,	200
MISCELLANEOUS: Curious Statistics: A Plagiarism; The Vienna Exposition; The Next Convention; The College Commencement: Maryland Institution for Colored Deaf-Mutes; The Glasgow Institution; Death of Mr. Whiton; Changes and New Appointments,	By the Editor, 206
NUMBER IV.	
A SUMMARY OF THE RECORDED RESEARCHES AND OPINIONS OF H. P. PEET, PH. D., LL. D.—II: Age of Admission and Previous Home Education; Course in Written Language; Higher Education; Moral and Religious Education; Mechanical Education; Qualifications of a Teacher and of a Principal; Organization of Institutions; Legislation; Legal Rights and Responsibilities; History of the Art of Instruction; Comparison of Periods; Present Systems; Unto All—an End; Catalogue of Dr. Peet's Publications by Titles and Classified Index,	
By HENRY WINTER SYLE, M. A.,	213
The Elements of Human Speech, as applied to the Instruction of Deaf-Mutes in Articulation,	By JOHN PHILLIPS, 241
Societies and Periodicals for the Deaf,	
By HENRY WINTER SYLE, M. A.,	255
The Perversity of Deaf-Mutism,	262
INSTITUTION ITEMS: American, New York, Pennsylvania, Ohio, Virginia, Indiana, North Carolina, Wisconsin, Michigan, Iowa, Columbia, Alabama, California, St. Mary's, Minnesota, Nebraska, Pittsburgh, Boston, Ontario, Liverpool, and Manchester Institutions,	By the Editor, 264
MISCELLANEOUS: Report of the Commissioner of Education: Conference of Würtemberg and Baden Instructors; The Vienna Exposition; The Next Convention; New York Convention of Deaf-Mutes; Resolutions on the Death of Dr. H. P. Peet; The Deaf-Mute Murderer: Visible Speech,	
By the Editor,	274

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THE SIGN-LANGUAGE.

BY B. D. PETTENGILL, PHILADELPHIA.

ALL artificial languages are destitute of any life or meaning in themselves. They are based upon a natural language, and derive their significance from it. This natural language consists chiefly of expressions of the countenance, gestures, and involuntary muscular movements; the varied intonations of the voice; the actions which accompany words spoken or written, and pictures, whether made in the air or on paper, or otherwise. These representatives of external and internal nature are self-interpreting and universally intelligible, and are for the most part popularly termed signs, and, taken together, are called the natural language of signs. The use of this language is indispensable in learning all artificial languages. "No child attains to speech" (says Tylor, in his "Early History of Mankind") "independently of the gesture language." Children can be taught the meaning of words representing external objects which are present and in sight without the use of any sign other than simply pointing or looking at the objects, but if the object is not in sight they must have some representation of the object made to them, either by picture, gesture, or otherwise; or if the word attempted to be taught stands for an internal feeling, the signs by which that feeling is manifested must

be made to give the word its true significance. Words may indeed be used to explain the meaning of other words, after the pupil has acquired some considerable knowledge of language; but as the words used for explaining were originally learned through signs, the new words are as really learned through signs as the other, though at second-hand.

Some teachers of the deaf and dumb in this and other countries, having by some means imbibed a prejudice against signs and a strong aversion to their use, are very careful to make frequent announcements to the public that in the instruction which they give to their pupils in language the use of signs is entirely dispensed with; but this is certain: either their pupils do not understand the meaning of the words they employ, or they came to the knowledge of their meaning through some kind of signs. If no signs were employed in their instruction, the pupils must remain in entire ignorance of the meaning of the words they are taught to use; if the signs employed were few and poor, their progress in attaining to a knowledge of language was slow; if the signs were many and good, their progress was more rapid.

But the idea, by whomsoever entertained, that any teacher of deaf-mutes altogether dispenses with the use of signs in the instruction of his pupils is a delusion. When reading statements of the profound ignorance of signs and the entire abstention from their use professed by the teachers under the German system in this country, I have often wished for an opportunity to inquire, "Do the teachers employed in those institutions never smile?" Should the reply be that they certainly sometimes do this, I would remind them that a smile is one of the most important and expressive signs known to pantomimists.

The teachers referred to would probably here inform us that it is not natural signs that they object to and disuse, but the artificial and arbitrary signs, which they claim are the medium of communication and instruction in the schools conducted under the French system. But it is not true that purely artificial and arbitrary signs are used in any of our institutions; all of our signs have some intrinsic significance,

some relation to the idea which they represent; and all of them are as natural as we know how to make them or as the nature of the subject admits of, with this reservation: that for the sake of dispatch we often abridge our signs in conversing with adepts in the sign-language, and make no extended descriptions nor long explanations where such are not necessary. This, of course, diminishes their intelligibility and expressiveness to outside observers who are not familiar with the sign-language. The methodical signs invented by the Abbé Sicard have pretty much gone out of use in all our institutions, and even these are as natural as such signs can be made. I am no advocate for any particular set of signs, and have no preference for any, except for those which are the most significant and the most natural.

We are sometimes informed by teachers under the German system that they aim to teach language to deaf-mutes in the same manner in which hearing and speaking children are taught, with the same use of signs as is employed in their case, and no more. The great objection to this is, that the varied intonations of the voice, which are of the greatest use in giving hearing and speaking children a knowledge of the meaning of words, are in the case of deaf-mutes unavailable. I do not hesitate to express the opinion that no congenital deaf-mute was ever brought to the intelligent use of any artificial language, written or spoken, except by a more extensive use of signs (other than vocal) than is employed in teaching children who hear and speak. Congenital deaf-mutes at school may be taught by signs one portion of the day, and then be taught the remainder of the day in the articulation class, where signs are prohibited, and still make progress, but the meaning of the words they attempt to utter must be taught them through the medium of signs, somewhere, by somebody, at some time, or else they remain in ignorance of them. Of the significance of articulate sounds they have no idea.

Our final conclusion in regard to the practice of those who attempt to discard signs in the instruction of the deaf and dumb is, that they are attempting that which is imprac-

ticable; that they neglect one of the most important agencies for enlightening the minds of their pupils; that they unnecessarily and uselessly hamper themselves in the work in which they are engaged, and that it would be greatly to their own advantage and to that of their pupils should they be led to alter their views and change their practice.

But there are those who, while admitting the disagreeable necessity of the employment of signs in the early stages of the instruction of deaf-mutes, are for discouraging, limiting, and restricting the use of them as much as possible, and for entirely discontinuing them as soon as may be. Of late, there has been a series of vigorous attacks from various quarters against the use of signs by deaf-mutes and their teachers. One unacquainted with the subject might be led to infer from the ardor manifested in these assaults that the habitual practice of sign-making must be one of the most absurd and pernicious indulged in by rational beings. The sign-language has been decried, denounced, and ridiculed as dangerous and pernicious; as a jargon; as a set of monkey-like grimaces and antics; as a rude, crude, imperfect, misleading language, the cause of all the blunders which deaf-mutes make in the use of the artificial languages which they attempt to acquire.

When we consider that signs are the natural language of deaf-mutes; that they derive more benefit from them than from all other sources put together; that nearly all their knowledge has come through this source; that the use of signs is absolutely indispensable to the attainment of the knowledge of the meaning of words, this violent raid upon signs is most surprising, and manifestly unreasonable.

The principal argument used to justify this opposition is, that if deaf-mutes are allowed to use signs at pleasure they will never learn artificial language. The opponents of signs maintain that as to master any language requires a great deal of practice in the use of it, if signs are freely employed by our pupils in their daily conversation, the amount of practice required for becoming adepts in the use of artificial language will not be obtained. The principle advanced

is tantamount to this: that no person can acquire or use two or more languages simultaneously, which is plainly in conflict with facts. I have heard of a case of a child in this city who, before he was three years old, could speak three different languages—French, German, and English; French with his father, who was a Frenchman; German with his mother, who was a German, and English with the servants of the house and with his neighbors. None of these languages interfered or were confused with the others. So in the case of deaf-mute parents who have hearing and speaking children, who ever heard of such parents refraining from conversing by signs with their children lest they should fail to acquire the language of the community around them? And I will venture to say that President Gallaudet, from his infancy till now, has been accustomed to converse with his deaf and dumb mother by signs, without this habit in the least degree hindering his attainment of an excellent knowledge of the English and other languages. Besides, to present the converse of the case, teachers of the deaf and dumb who hear and speak generally succeed in obtaining a very fair knowledge of the sign-language, though their social converse is for the most part maintained by means of speech. These facts prove, I think, that it is not necessary strictly to prohibit signs in any stage of the pupil's course in order to promote his acquisition of the English language.

Another argument employed against the use of signs is, that the order made use of in making them, and the imperfect condition of the language, are serious hindrances to the attainment by the pupil who uses signs of a correct and idiomatic style of writing the English language. That the peculiarities in the manner of writing of the deaf and dumb are not entirely owing to their habitual use of the sign-language is evident from the fact that foreigners, in attempting to use our language, make nearly as many mistakes, and often the same mistakes, as those which are made by the deaf and dumb; and that a very extensive familiarity with signs does not retard the pupil's progress is proved by the fact that the children of deaf-mute parents who have used

signs, such as are employed in our institutions, from their infancy, invariably, other things being equal, attain to a correct use of written language sooner than other congenital deaf-mutes who have not had their practice in sign-making. The cultivation of mind which the pupil obtains through the use of signs is a greater help to acquiring a correct use of written language than the difference between the two languages is a hindrance. I understand that Mr. A. Graham Bell expresses what I consider the very sensible opinion that congenital deaf-mutes should have their minds cultivated by a free use of signs for a considerable length of time before they can be prepared to master his highly-commended system of "Visible Speech." But notwithstanding my views of the indispensableness of a free and constant use of signs in the instruction of deaf-mutes, I am ready freely to declare that what in my opinion our pupils chiefly need for becoming adepts in the use of the English language is more extensive practice in language. Our pupils should write more, and read more, and spell more; but it does not necessarily follow that they should use signs less than at present. My chief complaint with those who denounce the sign-language is, that they put the blame for the want of improvement of our pupils in language where it does not belong; it is not the use of signs which is the obstacle to their progress, for the influence of signs is good, and only good, continually, but it is in the want of practice in the use of artificial language that all the trouble lies. It is because the sign-language is a more natural, a more expressive, and, in many respects, a better language than those which are written or spoken, that deaf-mutes have such a strong tendency to use it; words of themselves do not convey ideas except at second-hand, but signs do this, and deaf-mutes have very good reasons for preferring the latter. How dull, uninteresting, and unimproving our lectures to deaf-mutes would be were they delivered in artificial language instead of by signs! In my opinion, deaf-mutes should see and use signs more instead of less than they now do; they cannot see too many of them any more than they

can see too many good pictures, but as they may be looking at pictures when they should be otherwise employed, so they may be attending to signs, and using them, when their immediate duty and improvement require the use of spelling, writing, or speech.

When a pupil has ideas to express which he can better express by signs than by any other way, he ought, I think, to be allowed to use this medium. Nature prompts him to do this, and nature is wiser than any teacher. But when he can as fully and clearly make himself understood by artificial language as by signs, the former should be preferred for the sake of the practice. In the school-room, especially with advanced pupils, written or spoken language should be the ordinary means of communication; but on the play-ground, in the lecture-rooms and sitting-rooms of our institutions, signs should, I think, be allowed to reign unrestricted. Indeed, I have never seen a successful attempt made to banish them from those places.

To a large number of our pupils a very free and constant use of signs is indispensable to the enlightenment of their minds, as they never attain under our present methods of instruction to such a mastery of artificial language as to enable them to make it the medium of acquiring extensive knowledge on unfamiliar subjects through that source. If these pupils see and use but few signs, and the use of verbal language is the general law of the institution where they are instructed, the pupils will not only fail to acquire verbal language, but also fail to obtain that intellectual cultivation which they might have acquired through signs.

In reference to the peculiar condition of deaf-mutes, the only objects of prime importance for the teacher to set before himself in their instruction are: to bring them out of their benighted condition by furnishing their minds with ideas, and to give them the means of communicating their ideas to others in an intelligible manner, and of understanding communications which are made to them. Whether these communications are couched in absolutely correct and idiomatic language or not, or whether they are written or

spoken, are matters of but secondary consequence. These two objects of prime importance are completely accomplished in the case of all the pupils taught under the French system, where signs are freely used; all our pupils on leaving school are well informed on general subjects, and all of them can hold intelligent and intelligible communication with their friends; but a portion of the pupils taught under the German system, where the attempt is made to discard signs, fail in both of these points—they are not well-informed, and they cannot make themselves understood by others, nor understand what others say to them. A late writer in the *Christian Union* lays down the proposition that after a deaf-mute has become well grounded in the principles of articulation and lip-reading, he has greater facilities for acquiring knowledge through that source than by means of signs. This principle may be admitted, provided the pupil is very well grounded in those principles, and understands the meaning of the words employed; but how many deaf-mutes ever become well grounded in those principles? Mr. Rising, the principal of the articulation school in New York city, says in a late report of his institution: “It is probable that not more than one-half of the so-called deaf and dumb can be taught articulation.” The inference we must draw from this announcement is, that under the German system, provided all deaf-mutes who apply at those schools for admission are admitted and retained, one-half of the pupils under instruction are sacrificed for the benefit of the other half. The French system, where signs are freely employed, is certainly more beneficial to the whole body of deaf-mutes who seek instruction than the German system, where signs are to a great degree discarded, the former doing the greatest good to the greatest number. Another paragraph from Mr. Rising’s report is worthy of attention. “The language of signs and pantomime,” says he, “appealing (as it does) to the lowest order of intellect, can reach and stimulate it when the articulate method would make no impression; it follows that a certain class of mutes must be educated by the French method of signs and pantomime.”

Another writer on the instruction of deaf-mutes gives similar testimony, as follows: "Signs being an easier means for the reception and expression of ideas than words, even semi-idiot's can be made to use and understand them to some extent when entirely incapable of acquiring artificial language." From these considerations and testimonies I am convinced that any considerable diminution or limitation in the extent to which signs are at present employed in our institutions for the deaf and dumb, if effected, would prove an injury rather than a benefit to the cause of deaf-mute instruction.

A good deal has been said and written of late in regard to the proper order of making signs. I do not propose to engage in that discussion any further than to say that there is not, as I understand it, any invariable established order of sign-making, except the presenting the signs in such a way as will best subserve the purpose which the sign-maker has in view. If the object is simply, as is usually the case, to convey ideas, the teacher should make the signs in such a manner as most forcibly to impress those ideas on the minds of his pupils. If, however, his object is, by means of signs, to teach the order to be observed in the use of written language, he may make the signs in the order of that language if he chooses, and thinks that any benefit is to be derived from such a course, which seems to me quite doubtful.

The sign or gesture language, or, as it is sometimes called, the language of pantomime, is of great antiquity. Many philologists think that it was the original language of mankind. Prof. Whitney expresses the opinion that "gestures undoubtedly formed an important, if not a principal part in the earliest social communications." A writer in one of the encyclopædias thinks it almost a miracle that we do not find any tribe of men who make use of gestures as their sole medium of social communication in preference to articulate language, as the former, he thinks, is a much more obvious method of expressing ideas than the latter. Hence he infers that the first articulate language must have

been of divine origin. The gesture language is capable of such cultivation as to give expression to any idea that can be expressed by words with equal despatch and clearness to that of any other method of communication. In impressiveness and dramatic power, pantomimic signs have greatly the advantage of words and all other artificial signs; in fact, the very secret of eloquence lies in a skilful use of pantomime and gesture, or, as Demosthenes expresses it, the three prime requisites of eloquence are, "action!" "action!" "action!" To the orator and the actor the use of gestures and pantomime are indispensable to any good degree of success. Del Sarte, of Paris, the celebrated teacher of histrionics, lately deceased, spent his life in formulating the language of gesture and facial expression, and left behind him in the instructions given to his pupils a kind of grammar of pantomime. From his teachings most of the great actors of the present century derived their power of presenting to their audiences such masterly delineations of human passions and emotions.

The sign-language, though not the sole medium of communication of any class of people other than deaf-mutes, is occasionally employed as the means of expressing ideas by all people in all lands.

Quintilian says: "Amidst the great diversity of tongues pervading all nations and people, the language of the hands appears to be common to all men." The English and German races use fewer gestures perhaps than any other people, but whenever we of the English race wish to express ourselves more forcibly than usual we instinctively betake ourselves to gestures. We clap our hands to signify approbation, and for applause; we rub them in delight, wring them in distress, raise them in astonishment, wave them in triumph, kiss them to express good wishes, and join and shake hands as a token of union and friendship. We shake the head to signify the negative, and nod it in the affirmative; bow it as a token of respect, cast it down in humility, and throw it back in haughtiness. We contract the brow as a sign of displeasure, and wink with the eyes to manifest

secret connivance. We shrug the shoulders to manifest incredulity or repugnance, and elevate the eyebrows in surprise. We shake the forefinger to reprove or threaten, and shake the fist in defiance. We put the forefinger upon the lips to enforce silence, and to the ear to invite attention. We snap the fingers to signify a feeling of contempt, and stamp the foot in anger. We bite the lips in vexation, and thrust them out in sullenness and to manifest a feeling of displeasure. These and a thousand other pantomimic expressions and significant gestures are made use of by grave and unimpassioned Germans and Americans, whilst the lively and mercurial French and Italians use the language of gesture and pantomime much more abundantly. In the south of Italy and in Sicily travellers inform us that the common people carry on social communication nearly as much by gestures as by speech. The American Indians of different tribes and languages hold communication with each other entirely by gestures, and if ever that great desideratum, a universal language, shall be established among men and used by all people, the language of signs is the one the most likely to be adopted.

It is difficult to give by writing to those who are not experts in the use of pantomime a clear idea of the nature and genius of the sign-language as employed by deaf-mutes. Should I attempt, however, briefly and in a comprehensive manner, to explain the way in which deaf-mutes make signs, I would say that the natural signs made by them may be mostly comprehended under the heads of Descriptive, Indicative, and Imitative signs.

Descriptive signs are a kind of pictures drawn in the air; the sign for a table, for example, is made by drawing in the air with the two index-fingers an outline in the usual form of a table, and then dropping the fingers at each corner of the outline to represent the legs of the table.

Indicative signs point out the object referred to either directly or by reference to some peculiarity belonging to it. Thus the sign for a horse is two fingers of each hand placed

on each side of the head, and moved backward and forward in the manner in which a horse moves his ears.

Imitative signs are made by imitating actions of whatever kind. We make the sign for flying, for instance, by stretching out the arms in the manner of wings, and making the undulating motion which birds make when they fly.

The language of signs has some disadvantages in comparison with articulate language. It cannot be used in the dark, nor where the attention of the person addressed is not directed to the person who addresses him, but it has the counter-vailing advantage that it can be used in making private communications where the voice would be unavailable. In the present condition of the sign-language, it is better adapted to the expression of concrete than of abstract ideas. It is emphatically the language of passion and emotion rather than of reasoning and reflection. In graphic and dramatic power, in historical narration and rhetorical displays, all artificial languages are feeble and tame when compared with the language of signs; but in logic and metaphysics and kindred subjects, signs, as the language is at present constituted, are too vague, unprecise, and indefinite to be used with advantage. This arises, however, not from any intrinsic incapability or innate defect in signs, but from the state of incompleteness in which the language at present remains.

Says Professor W. D. Whitney: "If the language of signs had been elaborated by the consenting labor of generations, as spoken language has been, it might far exceed many a spoken language in wealth of resources and distinct apprehensibility."

In the foregoing remarks the writer trusts he has done something to prove that the language of signs is not such a poor, unworthy language as some seem to suppose; that it is of some use in the instruction of the deaf and dumb, and that it ought to be more extensively employed and cultivated, instead of being ridiculed, neglected, and disused.

THE METHODS OF DEAF-MUTE EDUCATION.*

BY G. O. FAY, M. A., COLUMBUS, OHIO.

THE methods employed in teaching mutes are especial only as they relate to the teaching and use of language. Mental discipline and the acquisition of knowledge, so largely the objects of general education, are secured by mutes by methods the same as those pursued in ordinary schools. The prominent use of object lessons, so called, is frequently remarked by visitors. This apparent characteristic results from the use of pantomime, which, as far as it goes, represents ideas far more vividly than any mere word description. Mental discipline is gained indirectly by the exercise of the faculties upon the successive branches of study which constitute the course, and which extend from the primer to the most advanced studies of the high school, the study of language having a prominent place throughout.

Disciplined mental power can be readily developed by the training of a series of years. Elementary knowledge upon the various subjects embraced in the course of study can also be readily imparted, if the instructor is a skillful user of pantomime. But, this done, if no more has been done, the graduate, diploma in hand, is worth less to himself and to the community than many a six-year old urchin first crossing the threshold of the primary school. The ability to read and write, and perhaps to speak the English language, while by no means a measure of the discipline and learning of the mute, is yet the real measure of his value in human affairs.

The different opinions held by the educators of deaf-mutes, and all the discussions, more or less heated, of the last fifty years, have centered around the question how best to teach language in its spoken or written forms. These

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are the living questions of to-day. They are embraced in the following category :

- 1st. Why not use and require of the pupil oral speech ?
- 2d. Why not use and require spelled or written speech ?
- 3d. Why not use and require syllabic or word signs made in the order of the English sentence ?
- 4th. Why use pantomime ?

The discussion of these questions will develop the principles and methods which underlie the subject of deaf-mute education, and which in their logical results determine the details of the daily school-room routine.

- 1st. Why not use and require of the pupil oral speech ?

In a hearing school, the very first morning, there gathers around the teacher a group of children who, every one of them, can hardly restrain the disposition to talk and whisper long enough for him, in a few well-chosen words, to draw his first lines of order. Why not pursue the same way, only more patiently, with a class of keen-eyed mutes ? The fact is, the teacher of the hearing school, his first morning, can use language with a certainty of being understood, and will listen to statements expressed with a correctness which the best talkers and lip-readers among mutes have never equalled in any school upon their graduation day. By experiment the teacher of the mute class will ascertain that one or two of the twenty can hear words shouted near to one or both ears. He may also discover one or two more who did not lose their hearing until after they had learned to talk, and from these, by pronouncing familiar words composed largely of labial sounds, slowly and with frequent repetitions, he may occasionally secure a response, assuring him that he is understood. The teacher is glad to find two or three even who escape the designation of "mute." But how with the sixteen or seventeen remaining, who can neither understand the teacher nor talk to him, but who yet constitute the body of the class and give it its character ? They are children who for ten years, the most plastic years of life, have been surrounded by talkers whose social interest in them has been chiefly expended in efforts to induce them to talk, or at least

to understand what is said to them. Baffled and disappointed in this, the parents have brought their child, always the pet of the household, to the institution to be educated. Withdrawn from his home-life, the social influence of which has failed to draw him from his profound isolation, he is now added to a community of hundreds similarly afflicted with deafness. Fond parents, who have perhaps expended hundreds of dollars in efforts to restore the hearing of their child—efforts only to be abandoned as abortive—still cling to the possibility that their particular child may be able to acquire the art of articulation and lip-reading, and so be restored to general society. Poor mute child! What hast thou not suffered at the surgeon's hand, guided by the sympathy—it may be the pride—of the parental heart! What art thou yet to suffer in laborious efforts to get what, in a large majority of cases, can never be obtained! Theorizers, and it may be teachers, have told the parent that all is easy, and that the good day is coming, is even now dawning, when the name “mute” will cease to be applied to any intelligent youth, except as a stigma. The answer to these fond parental expectations, and these positive professional claims, is found in the experience of the best European schools, where, after two generations of experiment, it is admitted that but a small fraction of the pupils taught are ever able to hold easy oral conversation with their fellow-men. The intelligent gentleman or lady, as the case may be, whom somebody has met somewhere, who understands all that was said in private and in public, and who conversed readily upon all subjects without exciting the suspicion of his deafness, is a mythical personage, finding a place naturally in the poetical department of the literature of deaf-mute education. With the greater number of deaf-mutes, as they exist in our communities, efforts to carry forward their education by oral speech will fail to give speech to any useful extent, and, which is a very serious evil, will also consume the time needed to acquire the elements of a good English education by an easier way. It is probable that with a large majority of deaf-mutes the improved method, as it is called,

if applied and persisted in, will prove to be merely a mangling process. Pains should be taken to restore to the use of oral speech those who are partially deaf, and those who retain something of the speech which they had acquired before they became deaf. A few other mutes, congenitally so, will also be discovered possessing sufficient ambition, adaptation, and skill to undertake the difficult art. Excepting the partially deaf, who properly are excluded from the category of deaf-mutes, these latter should pursue the art, at institutions at least, as a separate branch of study. The results of this study, growing from year to year, should be utilized by the conscientious teacher in the exercises of the school-room, where all who can talk or read lips with any facility or satisfaction should be encouraged and required to do so to the extent of their proficiency. How large a fraction of the school these will constitute, the experience and increasing skill of the future must determine. At present, in our State institutions, it comprises a little above one-tenth of the whole number.

2d. Why not use and require written or spelled speech?

Granting that oral speech, except with a small fraction, is impracticable, and that for the mass of deaf-mutes some other method of approach must be pursued, may not the teacher maintain the second line proposed, namely, that of using himself, and of requiring the pupil to use, written speech or language spelled with the manual alphabet?

Excepting the semi-mutes described above, at the outset of the course, at least, this is impossible. The teacher has yet to give the pupil the first forms of words, and, to do it most effectively, numberless illustrations and associated ideas should be introduced. Pictures can be used, and they are relied upon as far as available, but their scope and adaptation are very limited. The necessities of the situation in all schools, articulating schools included, force the teacher to avail himself for a time of the mute's own language, pantomime, a language characterized in certain quarters as a most dangerous thing. The emergency, however, calls for desperate expedients, and the language is used and the chasm

bridged over. With advancing education, however, acquaintance with written speech advances quite rapidly, and comes to be used in place of the dangerous dialect of pantomime, licensed temporarily under protest. The permanence and clearness of a written statement give it as a method of communication a high value, and one recognized largely in the best hearing schools. But in school exercises, continued throughout a whole day, and day after day, a serious drawback arises from the great amount of time consumed in the merely mechanical labor of writing. Writing at the usual rate, as compared with ordinary oral speech, has been found to require a time about nine times as long. To obviate this evil, the manual alphabet has been invented, and is now universally employed in the education of mutes. Finger spelling, confusing though it appears to a novice, really cuts down the mechanical element of time to one-third, or to only three times the time occupied by oral communication. Still, even with the assistance of the manual alphabet, written or spelled speech is to a mute exceedingly tedious. His mind chafes to escape from its mechanical fetters. No mute, however well educated, employs the manual alphabet to any considerable extent, much less written speech, in his familiar intercourse with his mute friends. The same is true also of those who spoke fluently up to a certain age, when, becoming deaf, they came to the institution for education. This irrepressible liking for another language does not, however, exclude the ready use of written speech, and, as a method, written speech, supplemented by spelled speech, should be employed in all cases where it is readily understood, and for a time as prolonged as may be, without wearying the pupil, or destroying his interest in the immediate object of recitation or attention. Its use will steadily increase, until at length, in the more advanced classes, it will be used almost entirely.

3d. Why not use and require syllabic or word signs, made in the order of the English sentence?

The part of this question referring to syllabic signs has been already answered, for syllables have no value until the

words which they compose are understood. Words learned, a syllabic alphabet, if clear, would be as much superior to the manual alphabet as it should prove to be more rapid. Of the various syllabic alphabets as yet offered to the mute, all have been rejected for their obscurity and ambiguity.

Word-signs are ordinarily free from both ambiguity and obscurity, and win a ready acceptance. They are rapid; more rapid even than oral utterance. Now, why can not a teacher, driven to the temporary use of pantomime before his pupils have gained a knowledge of written language, use it in a modified form, so constructing, dividing, and arranging a series of word-signs as really to use the order of the English sentence, each word being represented by its own characteristic sign? Would not such a method tend to restrict the exuberant disorderly mental operations of the pupil to the order of the English sentence, and so, while escaping the detrimental influence of pantomime, prepare him, unconsciously, for the acquisition of a correct order whenever, in his advancement, his word-signs have become translated into their spelled, written, or, it may be, oral equivalents?

We do not claim for the English language an order the most natural, and yet we experience no particular difficulty in carrying forward our mental commerce along its channels. We are familiar with the fundamental connection existing between our mental order of thought and our written style. When we attempt to compose in a foreign tongue, the influence of our vernacular speech in corrupting the necessary order of the sentence we know. And how often do we observe the same influence at work corrupting the English style of a foreigner. This corrupting influence of a vernacular language constitutes the central objection to the use of pantomime. From this element comes whatever of injurious influence it exerts upon the mute. Now, what difficulty is there in constructing a sign-language to order, one from which the corrupting element of a faulty order has been eliminated?

Such has been the reasoning of the educators of deaf-

mutes for fifty years. The desirability of so important a result has been universally admitted, and to secure it, the sign-making of institutions has been reduced rigorously to the order of the English sentence, and that for a generation. And in other institutions, with the same ultimate purpose, the same course has been pursued, more or less, especially with the younger classes. And yet in every class of every institution in the land, the moment the pupil passes the threshold which separates the proprieties of the school-room from the freedom of ordinary social intercourse, every muscle and feature and limb of the pupil combine to enact a panorama of pantomime, in which many of the teacher's signs are used indeed, but no more resembling them than the finished garment resembles the fragments upon a tailor's table. All attempts to control the order of the mute's pantomime have utterly failed. The language has a genius and laws of its own which he who uses it must respect. Shall a teacher persist in using a language of his own, theoretically valuable, when every one of his pupils continually uses, and prefers to use, another? With their remarkable ingenuity in comprehending signs, it is probable that they will catch the teacher's meaning with his English order, but not one of them will ever adopt it for himself, nor will the teacher himself use it outside of the school-room. Why not, then, when necessary, use the pupil's own language, inverted as it is, but no jargon, and so secure greater vividness of impression, and at the same time by patient toil educate the pupil away from the faulty order induced by his vernacular?

4th. Why use pantomime?

Or rather, why not use pantomime? What else can the teacher use in the earlier stages of the course? And at every stage explanations will occasionally be needed, where nothing can be substituted for it. It is the natural language of every deaf person, whether born so or made so subsequently. Amid influences favoring the development and use of pantomime and uncounteracted, it will surely come, and the speech previously possessed will gradually disap-

pear. This powerful proclivity of the deaf to pantomime is not always allowed its due weight. Because a mute boy, upon entering school, has but a few uncouth motions, it is sometimes said that he learns his signs at school, which is largely true, and the wonder is expressed why so much pains has been taken to teach what has so little value compared with the English language itself. And sometimes it is even suggested that the instructor has been delinquent in allowing the mental ground of the pupil to be so preoccupied. But the fact is, the teacher can not exclude signs from use if he would. The language is the outgrowth of the mute's social instincts, and is as natural to him as oral speech is to the hearing. He came to the institution with few signs, because his circumstances had been unfavorable for their development.

How many articulate sounds, if indeed a single sentence, would a hearing child utter, if from infancy it had been confined to the society of mutes? Give the hearing infant a speaking parent, and it acquires oral language, and we say it is its natural language. So give a mute child a mute parent, and it will come to school at ten years of age with a sign-language of considerable value. The rude sounds of the isolated hearing child and the uncouth motions of the isolated mute are both indications of a natural desire and adaptation for a better language. Two hearing children isolated would rapidly construct an oral language; and so two mutes associated will soon construct a stock of signs mutually understood. It matters not whether they are significant or conventional; they are signs, and are accepted by the users as representative of ideas. It needs no instruction to give a circle of mutes a sign-language. A teacher can undoubtedly help them to one much more expressive and exact than the one which, unaided, they will adopt. He is familiar with the efforts of many years, and, it may be, of generations. He has given to the language the study and the criticism of a cultivated taste. He can, and therefore should, do all in his power to improve their language, but he cannot prevent them from having one. The most

stringent rules of articulating schools have never been able to repress it. Crushed to earth, it will spring up again upon the first shower of feeling. Semi-mutes even, who already possess a correct use of language, and have a cultivated literary taste, take up the sign-language, in spite of all the exhortations of their teachers, with great avidity, and prefer to use it ever after when with hearing people even, if the latter will allow them to do so.

The mind of a deaf person craves a language addressed to a living sense. Any other language is to him an artificial one in the most real sense of the term. This natural tendency of the mute to the use of pantomime, and his actual use of it upon every conceivable subject, affords to the instructor an exact and rapid method of communicating with his pupils, if he chooses to use it. However educated the pupil may come to be in subsequent years, the time will never arrive in his history when he will not prefer it in conversation, if his companion is equally skillful in its use. Supplemented by manual spelling for technical expressions, it is fully equal to all the necessities of the school-room, the lecture-room, and the pulpit. By using it, the teacher, the first morning of school, may communicate ideas and offer illustrations which could not be introduced by the forms of oral or written language for years thereafter. However slow the pupil may be to remember his written or printed lesson, he forgets no pantomime. The teacher, however, knows that, potent and sufficient as pantomime really is as an educating influence and as a vehicle of ideas, yet the pupil must eventually come to the correct and free use of the ordinary forms of expression if he is to be, in any substantial sense, restored to society, and to have for himself the full benefit of books and newspapers. The judicious teacher will, therefore, use pantomime only when the slender stock of words understood by the pupil requires it. Used freely at first, it will gradually give way to better forms of thought, the teacher meanwhile keeping his eye steadily upon that highest and best achievement of mute education—the ability to use the English language correctly.

Or, comprehensively, the true methods of deaf-mute education are—to use and require oral speech, if possible; or, if that cannot be, to use and require written speech, as far as it can be done intelligibly and without weariness, leaving for all those processes of education where neither is available the use of the mute's own pantomime, remembering ever that it is but a scaffolding employed by the safe builder until the main structure—language—is completed, and then laid aside. The mute will, indeed, always return to it with the affection felt by every person for his own vernacular tongue; but living, as he does, surrounded by speaking persons, he will, however reluctantly, conform to their chosen medium of ideas, looking forward with earnest hope to that great unfolding, where the many tongues of earth, discordant now, will blend in one universal language.

[The reading of Mr. Fay's paper elicited the following discussion:]

JOHN HANCOCK, *of Cincinnati*. I am interested in this special branch of instruction on account of its own great method of bringing educational advantages, very long ago, to those that were left to grow up without any formative sort of instruction, except what the nature of surrounding circumstances might give them. I am greatly interested in it because I think through that instruction, and the methods adopted by those who have had most experience, we may derive lessons that will profit us in instructing those we may have under our care. I think that every one will agree that all the primary facts that are obtained by the mind, and which are the foundations of its advancement in after life, are derived through the senses. The deaf-mute is cut off from one channel of communication with the outer world; that is, cut off from expressing relations between the outward object and its internal nature, and this must take place altogether through one sense. Therefore the most philosophical and natural method, it seems to me, is to fall back upon that remaining sense, for of all the senses through which we gain these facts, these two—the eye and the ear—are those through which we derive the larger, and almost the whole, we might say, amount of these facts. The hearing being

cut off, the deaf-mute is confined to the seeing sense altogether. The seeing sense, I think we may say, gives the most vivid impressions we receive of the external world. Hence, philosophically considered, we should only attempt to teach deaf-mutes through the eye, and my observations, which have not been limited, as I have visited most of these institutions, goes to confirm the philosophy of this method of instruction. I think the deaf-mute must naturally expect to be taught through the eye, and almost exclusively. I mean mentally. Whether the speaking comes in as an advantage in the social element or not, the mental growth must depend upon the eye. I have seen several schools where the speaking method was relied upon almost wholly: but I wanted no greater proof of the superiority of our natural or sign-language than the fact that the very moment they escaped the teacher's eye, the boys and girls would go to talking together by signs. I noticed another thing, that whilst they were thus talking through the eye, their faces were lighted up with signs of intelligence and interest, just as much as with children possessed of all their senses: but as soon as addressed through the organs of speech, not having the use of the organs of hearing, they settled down again into a sort of clock-work manner: and I think it is unpleasant work, from the fact that very few of those who have been practising for years, continue the practice after leaving school. And yet it is not without interest that I have seen this, and I am glad that the experiment is being tried, though I think it never can succeed as a means of developing intellectual power. It is very natural that parents who have children that are deaf should desire to hear them speak. I can very readily imagine how a mother's heart would thrill to hear her child who had never spoken converse in articulated tones. As a means of social instruction, and for bringing the deaf-mute into communication with those who have hearing, I think it is a valuable thing, but it is only supplementary to the other. I agree with the essay, however, that mental instruction—that instruction which brings the child into communication with the outer world—must always be through the eye: and I think I see in this only the objective method of teaching. I think we have in this one of the best proofs of the importance of laying hold of nature and the world around us in giving instruction to youth. There can manifestly be no idea in a deaf-mute's mind until it has been translated

through the sight to the mind. Hence the sight must be intimately carried all along their instruction. It seems to me, in getting these ideas into the minds of deaf-mutes definitely, there must be a great deal of difficulty, and it must be only by repeating the process over and over until the impression is made and the knowledge is thoroughly gained by them. We have seen the deaf-mute, deprived of one sense, thus developed by this mode of instruction. Idiotic youth are also, I think, instructed by a similar method. Idiotic children are not only deprived of one sense, but, at best, possess all the senses in a very feeble degree; hence, the first work of instruction is to intensify their ideas through objects from the outward world, and, by bringing them constantly in contact with them by many repetitions, at last the feeble intellect is induced to take hold, and gets a firmer and firmer grasp upon things about it. So in all cases it is a building up process, precisely the same as in children with all the senses normally developed.

I saw in my visits some very wonderful results of teaching the spoken language to deaf-mutes. I was glad when I saw it. still I came away from those institutions, where I found the teachers as enthusiastic as anywhere, I believe, not at all convinced that that was the only plan of teaching deaf-mutes, as they claim it to be. The Professor Bell system, which might be called a picture language, as it is a sort of pictured representation of the elements of words, together with an outline of the position of the vocal organs in uttering them, may, in the future, be perfected, so as to be worked up to with greater facility in giving instruction; but it is yet a matter of experiment. He claims that those who are congenitally deaf-mutes may be taught to speak as well as youth who hear. I doubt, however, if that will ever be realized. Representing the positions of the organs of speech in this way must aid a great deal in this method of instruction; but the great difficulty, as every one can see, in teaching deaf-mutes to speak, is that of giving the inflections, and those who are congenital deaf-mutes that have been taught to speak, speak in a very disagreeable way. To their friends, however, it may sound more agreeable than to the ears of strangers.

W. D. HENKLE, *of Salem, Ohio.* The principles underlying the report we have just heard dive down pretty deeply into the philosophy of things. Mr. Fay discussed the subject of the order of thought, or of language, as we have it in English; the

question I wanted to ask is this, whether the deaf-mutes conform to the same order we do, or whether they develop a different order?

Mr. FAY. They have an order which will be fixed in some person, while another mute, perhaps, will use a form somewhat different. Just as different artists might do in painting a picture; one will begin at one point, and another at another. One artist may do it in a certain way, and another in another way. So one mute may have his own way, and another another way. It depends upon his manner of conceiving of the same thing.

Mr. HENKLE. The reason I asked the question is this: The question often arises whether there is a natural order of thought? The question I had been disposed to answer in the negative, that there is no natural order of thought. Mr. Fay's explanation portrays the fact that every man has an order of thought for himself. But when a language is built up, as we build up the English language, and as you build up your language in school, you introduce an order of expression; and whether we have a natural order of thought or not, we have a certain way of speaking. One man gets up to speak upon a matter, and will think of something in the latter part of his subject which another would present first, and follows an order of his own. I think the English language does not follow the order in which we think. Herbert Spencer talks a little on this subject in his essay on composition, and I asked the question, as it seemed to be brought out in this discussion. There is an individuality in this whole thing, and yet if we should all talk in accordance with the order of our thoughts, perhaps our ideas would not come out as they do.

W. WATKINS, of *Middletown, Ohio*. I have been interested in this subject, both with regard to deaf-mutes and the order of thought. I have been more particularly interested from the fact of the recollections of my earlier years spent with my grandfather, more than seventy-five years of age, who was perfectly deaf, having become so at the age of seven years. I wish to ask Mr. Fay to what extent this articulation has been carried under the most favorable circumstances, particularly because I had the good fortune to be present at an exhibition at the Deaf and Dumb Asylum at Indianapolis, where one of the most interesting features was the reading of an intelligent young lady. She articulated and read for us intelligibly, but in a disagreeable.

screeching voice, such as no hearing person ever employs. I would like to know whether this defect has, in any case, ever been overcome?

Mr. FAY. I do not know that there are any pupils who could not be made to talk in a certain degree, but probably a very small number would talk with any degree of proficiency, and those who do quit as soon as they leave the school. I have no idea that five per cent. will persevere in such a course. I trained a boy who never heard an articulate sound in his life, who became able to recite his lesson in botany, philosophy, or arithmetic, so that his teacher could understand him, and a person familiar with the subject would know much he said; at my earnest suggestion he pursued this course more than two years, though he was very anxious to drop it. I had a class of thirty who followed the same method for two years, and they were anxious to go back to the old plan of instruction, and I had to yield to their importunity. I found when I put them back that they had not advanced half as much as those who had been continued in the old method, and they were put into a lower class. We have many that talk quite well, but they are those who heard until they were seven or eight years of age.

Mr. HANCOCK. Would that boy you mentioned be able to read the lips of others than his teachers?

Mr. FAY. Yes. I know several who are lip-readers, and who can carry on considerable conversation, but these cases are few. There are no better lip-readers than right here in Ohio—no better either in Indianapolis or Northampton.

Mr. STEVENS, *of Salem, Ohio.* Is it not the case that they sometimes learn to talk without any special instruction?

Mr. FAY. In such cases, it is usually from the instructions of a kind father, or mother, or sister.

Mr. STEVENS. I remember one case in the State of Maine of a person with no special training that seemed to understand everything that was said. He was a very talented young man.

Mr. HANCOCK. Would you rely upon that plan for mental development?

Mr. FAY. No. I am prepared now to say what I would not have said three years ago.

THE SIGN-LANGUAGE IN PRIMITIVE TIMES.

BY RÉMI VALADE, PARIS, FRANCE.

[ONE of the exercises of the annual "distribution of prizes," the chief public ceremony of the year, at the Paris Institution for the Deaf and Dumb, is the delivery by one of the instructors of an address upon some subject relating more or less closely to the education of the deaf and dumb. The following, with one or two unimportant omissions, is the address thus delivered in 1866 by M. Rémi Valade. It is translated from the *Bulletin Annuel* of the Paris Institution of that year, by Mr. Louis C. Tuck, B. A., an instructor in the California Institution for the Deaf and Dumb. If some portions of the article strangely recall to such of our readers as were present at the Indianapolis convention of 1870 one of the papers read on that occasion, the dates certainly prove that M. Valade is not responsible for the resemblance.—ED. ANNALS.]

Is the sign-language, by the aid of which the first intercourse of deaf-mute children and their teachers is carried on—though now so far removed from our usual mode of communication—less natural to man than spoken language? Born, like the latter, of the imperious instinct of sociability, does it not render much assistance, in the beginning, in the expression of thought? Of this assistance, now so much lessened, does not the language of certain nations, at this time, still preserve unmistakable traces? Such is the interesting question which I propose briefly to examine. It is, of course, a question of circumstantial evidence.

Homer has applied to man an epithet signifying that *he utters articulate sounds*. The faculty of making signs might have supplied him with one not less significant, for it belongs only to man, and distinguishes him from the lower animals. By it, were he deprived of the superior gift of speech, he might still analyze his thought, give utterance to it, and establish with his fellows an exact and permanent means of intercourse, which would insure his supremacy.

An admirable provision of nature has proportioned the number of our organs to the importance of their functions. Taste and smell have only a restricted use ; we have only one nose and one mouth. Sight, hearing, and touch, on the contrary, are indispensable to the preservation of the individual, and to a life of relation with others ; we have two eyes, two ears, two hands ; and touch, of which all the other senses seem to be but modifications, is found all over the body, and has no less than ten special organs. The communication of thought, that faculty, the loss of which condemns man, destined to live in society, to isolation, was the object of no less care ; it is exercised by the aid of two distinct and independent apparatuses, which are yet capable of working together ; the one, in truth, less perfect than the other, but completing it, as it were, and supplying its place in case of need. The whole of the producing and modifying organs of sound, corresponding to hearing, constitute the first ; the arms and the hands, the principal organs of gesture, corresponding to sight, constitute the second.

It would be easy to show, if this were the place for it, that the same care has presided over their formation ; a sure proof that they have an equal importance, and that in the plan of the Creator they were each intended to concur efficaciously, though in a different degree, in the expression of thought. I do not hesitate, then, to say, that in the language of primitive man signs were much associated with the voice. And after so many centuries have passed, do we not still associate them ? Do we not always gesticulate in speaking, and do not these gestures, to which the vivacity of the South gives nearly the value of signs, add greatly to the clearness of discourse ? When in church, if a person in front of us, or a pillar, or any other obstacle, conceals the sacred orator from our view, no matter how eloquent he may be, no matter how pathetic his tones, do we not find it difficult to follow the development of his thought ? Who does not know that the perfection of simple discourse, as well as that of elaborate oratory, consists in the harmonious accord of the gestures with the spoken language ?

"I used frequently to attend the theatre," (says Diderot, in his "*Lettre sur les Sourds-Muets*,") "and I know by heart most of our good plays. Whenever I wished to criticize the movements and gestures of the actors, I went to the third tier of boxes, for the further I was from them the better I was situated for this purpose. As soon as the curtain rose, and the moment came when the other spectators disposed themselves to listen, I put my fingers into my ears, not without causing some surprise among those who surrounded me, who, not understanding, almost regarded me as a crazy man, who had come to the play only *not* to hear it. I was very little embarrassed by their comments, however, and obstinately kept my ears closed as long as the action and gestures of the players seemed to me to accord with the discourse which I recollected. I listened only when I failed to see the appropriateness of the gestures." "There are few actors (adds Diderot) capable of sustaining such a test, and the details into which I could enter would be mortifying to most of them. But I prefer to speak of the astonishment which those around me could not help showing when they saw me shedding tears at pathetic passages, still with my ears stopped. Then they could no longer restrain their curiosity, and even the least inquisitive ventured to ask questions. I replied, coolly, that everyone had his own method of listening, and that mine was to stop my ears—laughing a little to myself at the comments which my real or apparent oddness occasioned, and still more at the simplicity of some young people near me, who also put their fingers into their ears to hear in my fashion, and who were much astonished that it did not succeed with them."

Gesture, it must, then, be admitted, is necessary to the complete expression of thought; and if this is so to-day, notwithstanding the perfection of our languages, how much more must it have been so when languages were in process of formation! Let us carry ourselves back an instant in thought to that past epoch when our first parents, still unacquainted with the world, and fallen from the state of perfection in which they were created, had little other occupa-

tion than that of providing themselves with food and shelter. The discovery of a tree covered with fruit; of a spring, at which they might conveniently quench their thirst; of a cavern offering a secure retreat for the night, would be events, and the subjects of interesting communications.

Now, it cannot be denied that, except as a doubtful onomatopœia, in the imitation of the bubbling of a spring, the voice would be absolutely powerless as a means of expression in this case, and in a multitude of others. Gesture would be incomparably more effective. After having, as it were, raised the tree out of the ground, it would carry it up into the air, and project its branches horizontally. Then the arm would be extended, the hand would seize the fruit and break it off; it would describe the form and size of it, and even go so far as to give an idea of its color. For a spring, pantomime would be even more expressive. The fingers, rapidly moving, rising and falling in turn, imitate the undulations of the water, rising in bubbles forced up from the depths of the earth. Soon the knee touches the ground; the hand, hollowed and rounded so as to form a cup, is dipped into the liquid and moved to the lips. The satisfied face completes the picture.

Is this saying that our first parents expressed themselves, at first, only by signs? Such, assuredly, is not my thought. No, at no epoch of his existence has man been the *mutum et turpe pecus* of Homer and Lucretius. No sooner was he out of the hands of the Creator than the eye and the ear, at first purely passive organs, being excited by sensation, became, by degrees, active: after having seen and heard, man looked and listened. The attention was aroused, ideas were formed and preserved by the memory; thought was born, and with it the need and the desire to communicate it. Voice and gesture offered the two possible means of accomplishing this. Between these two man did not choose, for choice presupposes cognizance, but he made use, instinctively, of both. With the voice he imitated the cries of animals, the rattle of thunder, the roaring of the waterfall, all the sounds of nature; with the gesture he repro-

duced movements, actions, attitudes; he showed the forms of objects, described their dimensions, indicated directions and distances. Now, as in this division of sensible objects, the domain of signs was much broader than that of the voice, and as they were more often used, it came to pass that signs already constituted a language while speech was yet in a rudimentary state.

But it is not alone because signs are endowed with an incomparably greater power of imitation than words, that they took, at first, and, probably, kept for a long time, the chief place in the development of language. A higher and more philosophical reason, to my thinking decisive, made them, in the designs of Providence, the necessary forerunner of speech. Words, if we except quite a restricted number of onomatopes, have no natural relation with the objects which they represent. Though the most distant analogies were invoked, it would be impossible to discover any other relation than a conventional one between the sand, a tree, a rock, and the sounds by which we indicate these objects. Now, in order to establish this conventional relation, a mutual understanding would have been necessary; for a mutual understanding, language would have been necessary; but it was language itself which was to be formed.

Suppose we admit with the new philosophy, that speech proceeded spontaneously from the human mind, by a sort of explosion, did it at once reproduce thought in all its complexity? But if thought and its expression were equally complex at the outset, they could not be analyzed by each other, and instead of a begging of the question we meet here an impossibility. Signs escape this two-fold objection. Imitative in essence, they have no need of a previous understanding to convey an idea. Specific, like drawing, distinguishing, like drawing, the parts in the whole, putting everything in its proper place in the picture which they offer us, they analyze our most complex intuitions naturally and without effort. A man (understand that I speak of primitive man, laboring under the inspiration of nature to

form a language for himself) sees a horse gallop over a plain and leap a brook. To relate this scene, which has vividly impressed him, the voice furnishes him with one onomatopœia; he can imitate the neighing of the horse. But as to the rest, it does not afford him any help. In the utterance of more or less distinct sounds by which he might try to relate what he had seen, it would be impossible to distinguish between that which is meant for the action and that which describes the plain or the brook. There is not, on the contrary, a single essential circumstance that he could not reproduce by means of signs. First he would describe the place where the circumstance had occurred: the hands horizontally extended and moved away from each other would represent the plain; he would next indicate the stream, and would show its size and the direction of its course. Then, after having pictured the horse in a few rapid touches, and assigned him a place in the picture, he would imitate his gait by rapid movements. Finally, stopping him for an instant on the edge of the brook, he would cause him to stoop on his haunches, and then carry him with a bound to the other side of the stream. In this picture there is no confusion; all is clear and distinct. It offers what the art of the painter could not give, the entire succession of the details of the action, of which the pencil and brush could seize and fix but one. I believe, then, that we may look upon it as proved that, in these first moments, signs were of more assistance to man than the voice, and that it is almost entirely to signs that the analytical faculties of the human understanding owe their first development.

But to these advantages, which it is impossible to contest, the use of signs joins a number of disadvantages. Communication by them is not possible in the dark; the interposition of a body obstructs the view of them; their field of action is far less extensive than that of the voice. In another point of view, signs, being less adapted to abstract thought, since their sphere lies chiefly in material things, and keeping man from considering seriously his own

inner nature by directing his attention to the outside world, instead of giving wings to thought as spoken language does, rather seem to chain it to the earth. Moreover, being destitute of that flexibility which connecting words give to most spoken languages, signs do not assist reasoning, and are not conducive to reflection. Therefore, as consciousness, being gradually developed, enlarged the horizon of thought and opened the moral world to man, signs were not sufficient to enable him to take possession of this new domain. An instrument at once more powerful and more delicate had become necessary, and, under the influence of this new need, spoken language had a tendency to take the place of the language of gesture. The human mind, trained to observation by the use of signs, had formed habits of analysis: it was ripe for this progressive step. But spoken language did not develop itself side by side with the sign-language. More distinct and more precise, answering better to the aspirations which began to rise in the soul, and not less happily to the material needs, it tended more and more to exclude the language of gesture. In proportion as the one increased the other decreased; so that, after a lapse of time to which it is impossible to assign a duration, an entire change in the relative importance of the two modes of expression had taken place. Speech, the vibration of the human soul, became the ordinary interpreter of thought; by it all intellectual communications were carried on, while signs, insensibly deprived of their original value, and reduced to no more than gestures, shared with accent the manifestation of the feelings which governed the discourse. It is thus that in certain plants the calyx dries up and dies, when the expanded flower has no longer need of protection.

An unexpected light is thrown upon one of the most difficult problems of linguistics by a phenomenon which was produced during this phase. Mimic discourse is subject, by its very nature, to two modes of construction, intimately associated, though essentially different. Neither is opposed to spoken language, but this could not adapt itself to both, and it came to pass that the same construction was not fol-

lowed everywhere. Each race, guided by its peculiar tendencies, adopted that which its own instincts prompted. Language, among all, faithfully reproduced its type, and thus arose these two grammars, different in so many respects, one of which is found in the extreme East, among the Chinese, the Coreans, and the Anamese, and the other is that of the Indo-Europeans. This evolution of language, this incarnation of speech, was not accomplished all at once. It was brought about by a slow and almost insensible process, of which man was not conscious, and which he has not remembered. Among the causes which contributed to bring about this division, there was one which acted more energetically than the rest, and to which I must call attention.

Some explanations are here necessary. "Syntax, in natural pantomime, does not differ sensibly from construction. Its object is to produce and arrange the signs in the order best fitted to picture before the eyes with precision the real or imaginary scene which the memory, or the imagination, draws for us. It follows, therefore, that there are in mimic construction two very different things to consider: *the order in which the signs succeed each other, and the relative positions in which they are made.*"* The order of their succession leaves few traces on the memory. On the contrary, the picture resulting from their relative positions remains in the mind; it is seen a long time after the signs have been made, and it is easy to conceive that spoken language, at the time when it was yet in its infancy, may have been moulded upon it. It is easy to conceive, also, that all the points of the picture being distinct and present at the same time to the mind, the order in which speech reproduces them may vary. The essential point is that all the details should be reproduced, and that the picture should not be marred. Thus two painters, having to reproduce the same landscape, might not begin from the same point, and yet they might produce similar pictures. This is the

* Essai sur la Grammaire du Langage naturel des signes, p. 34.

reason why, in Greek and Latin, the order of the words is so variable. This is the reason why other languages, whose origin is the same, have often very different modes of construction. The introduction of alphabetic writing would make no change in this state of things; men would write precisely in the order in which they were accustomed to speak. The order of development in such a case, which seems to us to have been that of the Indo-European languages, would be as follows: *Language of signs, spoken language, alphabetic writing.* But the organic tendencies are far from being the same with all men, and it ought logically to be admitted that, among some races, peculiar circumstances, as a different intellectual constitution, an organization rebellious to pronunciation, would cause, by an effect the opposite of that which we have just seen produced, the language of gesture to predominate over spoken language. And this unconscious, unreasoning preference, proceeding entirely from instinct, might prevail a long time; for pantomime, not excluding conventional signs, would, to a certain degree, satisfy new requirements. It might even, as we shall soon show, lead quite early to the invention of an ideographic writing like that of the Egyptians. This point admitted, the following question presents itself for consideration: *Suppose spoken language to exist as yet only in the germ, and intercourse between men to be carried on by signs; then figurative writing being invented, what order will it follow?* Its tendency will certainly be to group the characters in such a way as to reproduce the picture presented to the mind, and it will be able to do this without difficulty in the more simple cases: as, *A wolf pursued a horse; God gave intelligence to man.* But when the thought to be expressed is complex, this will become wholly impossible,* and as there must still be some order, the thought will follow an order of expression which corresponds less closely with its nature, but which will not arrest it in its progress. The use of such a writing will evidently have the effect to

* *Essai sur la Grammaire du Langage naturel des signes*, pp. 74, 86 et seq.

confirm the habit of this sort of construction which the mind had already contracted, so that, after having passed from the language of signs into writing, it will pass from writing into spoken language.

I will not go so far as to assert that the races which peopled Indo-China present this peculiarity; but the hypothesis is legitimate, and worthy of being examined. It is based, in the first place, upon the very structure of these languages. "Rejecting those long and complicated forms of expression by which the Greek and Latin languages group with so much art the multiplied details of a single thought, the Semitic languages," says a learned philologist, "can make propositions succeed one another only by the single device of the copula *and*, which is the secret of their period, and which, with them, takes the place of nearly all the other conjunctions. These languages are almost wholly ignorant of the art of subordinating the members of a sentence to one another. Simple and without inversion, they make use of no other process than that of juxtaposition of ideas in the manner of the Byzantine painting. They are entirely destitute of style. To join the words into propositions is the most they can do; they cannot perform the same operation with the propositions themselves." * * *

"China and Egypt, apparently so different, but resembling each other in many common customs, would furnish some remarkable analogies. The ancient language of Egypt, to-day represented by the Coptic, appears to have been a language similar to the Chinese, monosyllabic, without a developed grammar, supplying the place of inflexions by exponents grouped around the root, but not united with it. To speak only of China, the language and the civilization of which are better known to us, is not the Chinese language, with its inorganic and incomplete structure, the image of the barrenness of mind and heart which characterizes the Chinese race? Sufficient for the needs of life, for the technics of the manual arts, for a slight literature of poor quality, for a philosophy which is only the expression, often delicate, but never lofty, of sound common sense, the

Chinese language excludes all philosophy, all science, in the sense in which we understand these words."

All these peculiarities, save the last, with which we have nothing to do, are common to the Chinese with the sign-language. This also is destitute of grammatical inflexions; parts of speech are unknown to it; and its numerous radicals, without being either verbs, adjectives, or substantives, are capable of becoming all these. With this also, all kinds of modifying circumstances are expressed by individual signs independent of the modified sign. As in the Chinese, the propositions follow one another without being connected or subordinated. Like the Chinese, it possesses few conjunctions besides the copula *and*. I add that in the two languages the constructions are nearly identical. How shall we explain this strange conformity, if our hypothesis is not accepted? The system of writing of the Chinese is itself an indication of the long continuance of signs in their language. "The writing of the Chinese," says Leibnitz, "produces a result equivalent to that of our alphabet, though it is infinitely different, and *might seem to have been invented by a deaf person*." And, in reality, except for the phonetic element which was introduced into it last, this system is such as a people of deaf-mutes would form.*

Our hypothesis receives a high degree of probability from the habit, common to all the nations of Indo-China, of assisting themselves in conversation by tracing in the air with the hand the characters of which the image is formed in the mind;† a singular habit, which has caused the author of the "*Soirées de Saint Pétersbourg*" to say that "*while other nations write their speech, the Chinese, on the contrary, seem to speak their writing*."

Abel Rémusat expresses the same idea in other words: "The Chinese have," says he, "an infinity of delicate articulations to distinguish the syllables which are used to pro-

* See, in M. Rémi Valade's *Etudes sur la Lexicologie et la Grammaire du Langage naturel des signes*, (p. 200 et seq.,) the singular method of correspondence contrived by some deaf-mutes of Marseilles, who had not been educated.

† Abel Rémusat, *Grammaire Chinoise*.

nounce thousands of characters." Syllables which are used to pronounce characters! Does not this expression imply that, in the Chinese language, speech is only an accessory, and that upon writing, that is to say, upon the representation, real or conventional, of objects, the principal part in the expression of thought is devolved? At least, can it be denied that, while with us writing represents the idea through the medium of speech, with the Chinese speech represents the idea through the medium of writing; and how shall we explain this, if not by admitting that with us speech preceded writing, and that with the Chinese it followed it?

The great Leibnitz says: "It would seem that the abundance of written characters, with which the Chinese have provided their language, has diminished its facility of formation, so that very often the want of words and their double meaning oblige them to make signs in the air with their fingers in order to explain their thought and remove its ambiguity." Now, is it a perversion of the text to interpret it thus? "The habit of expressing themselves by signs has interfered with the development of spoken language among the Chinese; so that very often the want of words and their double meaning oblige them to have recourse to signs."

Let us now take a rapid glance at the results which the persistent use of the language of signs must have produced.

The habit of describing objects, and of reproducing the scenes of life in signs, produced and developed skill in imitation, and as the distance from pantomime, which is a fleeting picture drawn in the air, to a permanent picture drawn in the sand or upon stone, was not great, it was soon passed over. Now, this drawing, rude as it was at first, yet suggested an idea. It was soon remarked that by uniting several of these a thought could be fixed, a recollection could be perpetuated: writing was discovered. To descriptive signs, representing material objects, were gradually added at a rate marked by the progress of the mind, first, symbolical signs; next, conventional signs. Then the system was complete, and while elsewhere the creation of

an alphabet required centuries and the efforts of the most powerful minds, writing was born in China naturally, and, as it were, of itself. This writing, it is true, was very defective; formed from a multitude of diverse signs, it rendered little aid to the combinations of thought, and it interfered, by the material character of its signs, with the development of philosophical ideas. It constituted, however, a powerful lever by the advantage which it gave, in common with all modes of writing, of furnishing the memory with a staff, and of rendering knowledge transmissible. The experience of generations accumulated; arts and industries were born; the sciences, except perhaps those of pure speculation, were cultivated with varying success. Hence we see rapidly developed a civilization, which, conscious of its own precocious superiority, despised all that was not itself, but which was strongly imbued with sensuality, and was destined to meet, in the very writing which had given it birth, an obstacle which would arrest its progress. Indeed, as will always be the case with any writing every character of which directly represents an idea, the characters multiplied to such a degree that after having been an aid to the memory, they ended by overloading it. Progress, until then rapid, now received a check, and, finally, entirely stopped. Civilization was blocked and became stationary.

Certain peculiarities in the oral language of the Chinese are explained by this hypothesis. It has not known the phases which have given our languages their formation and grammatical parts of speech. The needs to which the latter owed their rapid development, in part satisfied by the prevalence of imitative language, did not make themselves so energetically felt among these peoples. Their spoken language remained a long time in its childhood, and when at length the time came for it to grow out of it, the language of signs, already adult, in general use, and in possession of a writing, imposed its form upon it. Thus while with us signs were conquered by speech, with them it was speech that received the yoke. By a sort of tacit agreement, resulting from the thoughtless imitation of each by all, the

Chinese formed the habit of substituting for the pantomime signs, or rather for the characters which corresponded to them in writing, not a succession of utterances, which would have lessened the rapidity of discourse, but a very short word which answered the purpose, and which was easy to remember. But, as the number of combinations capable of forming such words is necessarily very small, they had recourse, in order to increase them, first to the differences of intonation and of accent, and then to all sorts of devices. Hence comes that language without onomatopes, monosyllabic, and monotonous, so different from ours, because it originated in other conditions, and had to supply other needs; hence that grammar limited almost entirely to syntax, those strange constructions which are so difficult to understand, that singular identity of forms with signs; hence that habit of supplying the uncertainty of oral language by the more exact representation of the written characters traced in the air with the hand or fan.

Perhaps I am mistaken; but in this hypothesis, which shows us thought extending over the world in two different forms, creating in the East and in the West two opposite civilizations, it seems to me there is something grand, something which impresses the mind, and fills it with admiration and reverence for the power which has made means so diverse concur in the accomplishment of its purpose.

In restoring to the sign-language its patent of nobility, in showing that it is divine in the same degree as spoken language, and that it has been necessary to the development of the latter, I have wished to prove that, in spite of assertions which will not prevail, it is the only rational means by which the mass of deaf-mutes can be educated.* I shall

* The teachers of the Paris school make use of four modes of communication with their pupils, viz., signs, writing, dactylogy, and spoken language. Writing and dactylogy are employed, together with the language of action, for teaching the mother tongue. Signs are added as a means of government and influence; they constitute an eminently sympathetic language, and it is under their guidance that the intellectual development of the young deaf-mute is most happily accomplished. As for oral language (artificial articulation and reading from the lips,) it is considered in this institution as a useful, nay, even necessary, complement to the education of the deaf and dumb, and is, accordingly, taught to all the pupils without distinction; the success in different cases being proportionate to the widely varying aptness of the individuals.

be glad if I have succeeded. I shall be more than glad if, its importance being thus realized, it shall be acknowledged that this precious instrument ought to be the object of special and continuous care, having for its purpose not alone to preserve it from all adulteration tending to transform it into *argot*, but also to retain its character of a *natural language*, and to bring it by degrees to be intelligible to hearing and speaking persons. This care, this watchfulness, advantageous to instruction, will not be lost to morality; for in our relations with our pupils we have more than once realized the truth of this observation of Joseph de Maistre: "All degradation, individual or collective, is immediately shown in a corresponding degradation of language."

WHAT INFLUENCE HAS TEACHING THE DEAF AND DUMB UPON THE TEACHER HIMSELF?

BY W. A. COCHRANE, M. A., FLINT, MICH.

WE often read of self-made men; men who have been eminently successful in the busy marts of trade; men who have gained an exalted position in the broad field of literature, who have delved deep into the intricate sciences, and have unfolded new truths to the astonishment of the world; men who have discovered the subtle forces of nature and the influences of those forces upon each other and upon all matter animate and inanimate. And we often think of such as shaping their own destiny, marking out their own path and gaining success by their own innate powers unaided by external influences. This is often a mistake. It is the times that make the man. It is the circumstances surrounding him. It is the outside influences giving life and activity to the innate powers which the Creator has placed within him. Ten thousand influences are continually leading him this way and that, prompting him to new efforts and to new lines of action.

We all know that society has had a great influence in making our lives what they are, and will have a great influence

in the future in making them what they finally will have become at the end of our earthly life. Society lifts us up, places within us a holy ambition, prompts us to noble deeds and generous actions. Or, if the social atmosphere in which we live is tainted with the malaria of evil, with secret and open vice, our characters drink in the deadly poison and our lives show its evil effects. All noble impulses are stifled, the moral faculties are deadened, conscience is perverted and finally becomes an unsafe guide.

Again, our daily occupation has a great influence in the making of our lives. The employment in which we are engaged and to which we give our time and our thought leaves its impress upon our minds and hearts. And this brings me to the question which I have placed at the head of this paper, viz., What influence has teaching the deaf and dumb upon the teacher himself? I wish to look at this question in two particulars only:

1. Its influence upon the intellect.
2. Its moral influence.

It is a law which holds good in the realm of mind as well as of the body that exercising any faculty strengthens, invigorates, and builds up that faculty. If I wish a strong and vigorous body frequent and long-continued exercise can alone give such. If I sit down in idleness the body is enervated and weakened, the muscles are undeveloped. Just so it is with the mind. If there is nothing to call it forth, to give to it activity and intensity, it lies dormant. The latent power is there, but it must be put in motion or it is of no use.

Now, we well know that all the different kinds of employments do not require the same amount of brain force. The mind is exercised much or little, according to the nature of the work to be performed. Some kinds of work require very little assistance from the brain. In fact, the mind can almost be asleep and the work go on. The hands do the work, not the head. The muscles act, not the mind. True, back of the hands and back of the muscles, there must be some mind to command, to give orders, to direct;

but it is not a mind thoroughly awake, active, quick, energetic. The ignorant hod-carrier has but little use of a mind in his daily routine; in fact, instinct is almost sufficient; and, if he sticks to his profession and does nothing outside of his daily toil to quicken his intellect, when he comes to the end of his life he is the same ignorant hod-carrier still. His work has had no influence in developing his mind.

How different is it with the scientist and the man of letters. Their minds are alert and active; they are grappling with the questions of the day—social, moral, and metaphysical. They are searching after more light amid the dim labyrinths of science. The mind is expanded until it unfolds some new truth, discovers some new law. Hence one kind of work may build up the mind and sharpen the intellect, while another kind leaves it dormant and inactive.

How is it with the instructor of the deaf and dumb? Does his work bring new vigor to the mind? Does it give more strength and power to the intellect? Does it have a tendency to lift up the teacher to a higher plane of literary culture? These questions have come time and again to every intelligent thinking teacher, and so often as they have come so often have they been answered, perhaps without an exception, in the negative. Our work does not build up the mind; nay, rather it has a tendency to pull down, to lower the standard of previously acquired literary attainments. Let us see if this is not so. The teacher comes to his work with a disciplined and cultured mind. He has spent years in study and thought. Many instructors have spent four years within the college walls treasuring up knowledge of the past and present, studying the languages of the living and the dead. Their knowledge is supposed to be varied and their literary attainments of a high order; but they come to the institution and enter upon their work, and day after day, week in and week out, their minds are occupied in teaching, not the higher branches which require thought and study, but the simplest rudiments of knowledge. The teacher has to commence at the foundation, at the very beginning of all knowledge. For years his time is spent in

teaching his pupils how to write a simple English sentence correctly, a task which he himself learned when a mere child fondled on his mother's lap. The first three or four years in the school-life of every class is spent in teaching the proper order of the elements of a sentence. That is the great work of the teacher; indeed, it might almost be said that it is the only work. Language is first, language last, language all the way through. And can it be that such work has an elevating influence upon the mind of the teacher? Does it lift up the intellect to a higher point? It is impossible. The mind, like the body, grows from what it feeds upon; and, if the mind is occupied with small and trivial things, its growth is checked, its strength and vigor are weakened, its perceptions are blunted.

It is very different with the teachers in the public schools, academies, and higher institutions of learning. They are brought in contact with a higher order of intellect. Their pupils are far advanced in literary pursuits. Many of them are grappling with the knotty problems of higher mathematics, and looking into the subtle forces of chemistry. And the teacher, that he may be able to solve the difficulties which are continually arising to those pursuing the higher branches, must spend much time in thought before entering the class-room. The studies which are taught demand previous and careful preparation on the part of the teacher himself. Before presenting any subject to his class, he looks at it in all its different phases, and in all its relations to other subjects. And such study and thought must have a direct influence upon his own mind. Such instructors do not teach the alphabet of knowledge, but the higher and more intricate subjects. They search for the Creator's foot-prints down in the bowels of the earth, and trace His thoughts and designs upon the flinty rock. They hold converse with the forces of chemistry, and look into the laws which govern the universe. Such work must have a reflex influence upon the mind of the teacher.

These higher branches which require work on the part of the teacher as well as the pupil are never taught in our in-

stitutions for the deaf and dumb. The seven or eight years—the time allotted to a pupil in most of the institutions—is by far too short to bring them up to so high a point of literary attainment. True, we approximate towards it in the college and high classes; but it must be remembered that there is but one college for the deaf and dumb in all the United States, and that in many of the institutions no high class has ever yet been formed. So that a large proportion of the instructors of the deaf and dumb must inevitably spend their time in teaching the simplest elements of knowledge; in telling the pupil, time and again, that the phrase, “a black horse,” must always be written in that order, and never “a horse black” or “horse black a.” Such work is important and necessary in the education of the deaf and dumb, and will be necessary perhaps till the end of time. It may seem beneath the capacity of a trained and cultured mind to engage in such work, and that the teacher spends his strength without receiving any strength in return.

But, it may be asked, does not the instructor of the deaf and dumb need to exercise his mind? Does not his work require thought? Most certainly it does, and the teacher who has no need of exercising his mind or of using his thought had better leave the profession at once. He has missed his calling. He never can succeed. Our work does require a certain kind of thought and plenty of it. But it is not the kind of thought which builds up the mind of the teacher; which opens to it new and higher fields of knowledge; which brings to it new truths which were before unknown. It is thought as to how simple facts and truths can be made more simple. It is thought in regard to the best method of presenting facts already in the mind of the teacher. The mind is active, not in searching out new truths, but in simplifying those already known. Such mental activity can have but little influence in the development of the mind. Hence, we are driven to the inevitable conclusion, unpleasant though it may be, that teaching the deaf

and dumb does not have an elevating influence upon the intellect of the teacher himself.

But, in the second place, what influence has teaching the deaf and dumb upon the moral faculty of the teacher? Upon this part of the subject there is need of but few words. There certainly can be nothing in our work which has a tendency to weaken the moral faculties, but it has rather a direct influence to uplift and strengthen. The teacher has a broad field for active Christian work. Many of his pupils come to him without any idea of a Supreme Being, with no knowledge in regard to the joys and felicities of the heavenly life, or the sorrows and despair of the lost. What lies beyond in the future they know not. The future is to them a sealed book. Impenetrable gloom shrouds the mind of the pupil, and keeps him within the narrow limits of his daily experience. The great hereafter, with all its hopes and all its joys, is unknown. The beautiful story of a Saviour's sufferings and death, and triumphant resurrection, has never echoed through the silent chambers of his soul. The teacher's work is to lift the veil that shuts out the beauties and glories of the heavenly Jerusalem; to unfold Christian truths; to hold up a crucified Redeemer, and so in time the pupil comes to understand the plan and need of redemption. The teacher sows spiritual seed, and in time the promised harvest comes. It fails not. He sees one and another of his pupils looking up trustingly and believingly, and saying, Abba Father. Can it be that the teacher receives no new strength in his own soul when he sees his efforts and labors crowned with such glorious success? Nay, verily; he receives new vigor, new spiritual life, new encouragement to labor in the Master's vineyard. His own soul is expanded and built up; his spiritual perceptions are quickened; his heart is drawn out more and more in sympathy and love for those whom he is called to teach. He is lifted up to a higher Christian plane. It cannot be otherwise.

Perhaps we have all heard some missionary of the Cross, who has returned from his work among an ignorant and degraded people in distant lands, relate his experience and

the joy and spiritual strength which have come to him in his work. It was my privilege some time ago to listen to one of these returned heroes. He was an old man, far past his three-score years and ten. Half a century of his life had been spent among an ignorant and superstitious people. I remember that one of the topics of his discourse was something like this: Missionary work is a paying work for the missionary himself. He receives his wages not in dollars and cents, but in spiritual strength and a stronger faith. The venerable man compared his life when he entered his work with what it became after years of toil and anxious waiting. At first his faith was weak, at times his confidence in the promises of the Almighty was shaken, doubts and fears surrounded him, but after years of prayer and faithful labor the shadows began to lift from the mind of the people, superstition melted away, and one and another began to inquire the way to the heavenly city. His heart was cheered and comforted, the strength which he had given out returned into his own soul in a double portion, his faith became stronger, his doubts were gone, he took hold of the hand of the Almighty with a firmer grasp, he was built up more and more into the divine image, his work gave to him new spiritual life and strengthened him in all the Christian graces.

Our work is as truly a missionary work as his. We are called to labor among those who have no conception of a God; who know nothing of the kind, loving, merciful Father of the universe; whose ears have been closed to the simplest facts of Bible history; whose minds are shrouded in ignorance as dark as that which has settled down upon any of the nations of the earth. To lift these shadows and to let in the light of divine truth is certainly a noble and blessed work. In our profession there is an opportunity for active Christian effort, and I believe that it is this fact which to-day keeps so many highly educated and cultured men and women in the profession. It is not the emolument, or the honor, or the pecuniary recompense, or the intellectual advantage which keeps these faithful ones

at their arduous work, for other professions offer such things more profusely than ours. It is the desire to do this missionary work, to lead some one in the way of life who without our help and guidance might perhaps never find it. If we do this work faithfully our own souls will be quickened and built up.

But if teaching the deaf and dumb, as has been asserted, does not bring any intellectual advantage to the teacher, if it has a tendency to check the growth and expansion of the mind, what ought the teacher to do? Should he leave the profession? No. It is a noble work and one which requires well trained, highly educated and cultured men and women. But we can all spend part of the time outside of our labor in some kind of mental improvement, and this we must do, or the mind will become stagnant and inactive. I know that it is hard, after being wearied with the labor and toil of the day, to enter upon any course of study or mental culture. It is much easier when the hard work in the school-room is done to sit down in listlessness and inaction and dream away the time until the beginning of a new school-day. But if we are ambitious, if we wish to gain a higher point of mental discipline and mental culture, we will close our ears to these invitations to rest and ease which come to us as soon as our school duties are done. And as we spend part of the time in lifting up the minds of our pupils and giving to them new thoughts and ideas, so ought we to spend a certain portion in self-culture, in storing our own minds with new facts and exploring new fields of thought and inquiry. We can gain mental strength and vigor in various ways. I will simply refer to two or three of the more prominent.

First, by reading; not simply the daily papers and current periodicals of the day, but standard works, the production of the best and greatest minds of all time. We should read scientific, historical, and biographical works. And if we spend part of the time outside of our school work in this kind of mental culture our minds cannot become rusty, but will have food upon which to feed.

Second, by writing. We take into our minds the thoughts of other people; we can put these thoughts into a new form and clothe them in a new dress and send them forth in a certain measure as creations of our own mind. We can put in visible form the thoughts which are continually flitting through our minds upon different topics. We can write out our opinions upon the social, political, and moral questions which are to-day agitating the world. Even in connection with our own work there is need of careful and earnest thought in preparing a better class of text-books. It is a fact that a large majority of the books in use in the different institutions are unsuited to the wants and necessities of the deaf-mute. Indeed, the only books which are adapted to the wants of our pupils are those written by men in the profession, who understand the wants and capacity of the deaf and dumb. But the number and variety of such books is unhappily very small. The best interests of the deaf and dumb demand new and simpler text-books in history, arithmetic, physiology, and in fact through almost the whole range of deaf-mute instruction. Here is a field, and a broad one, in which the mind of the teacher can busy itself.

Third, by society. The mind is brought in contact with other minds of a high order, discussions on the questions of the day spring up, new thought is elicited, new views are brought forward, and thus the mind is kept awake, busy, active.

Hence, if we wish to attain to a higher literary excellence, it is not absolutely necessary that we should leave our profession and join some other. If we labor faithfully outside of the school-room we can make advances in knowledge. And the more we read, the more new facts and ideas we gain, by so much the more are we better teachers.

A DEAF AND DUMB SERVICE.

[THIS lively description of a religious service of deaf-mutes, as it appeared to an observer unacquainted with the sign-language, is taken from *Fraser's Magazine* for March, 1869. We are informed that the deaf and dumb of London, whose Sunday service is here described, are soon to have a church edifice of their own.—ED. ANNALS.]

It is Sunday. We are in the familiar lecture-room of the Polytechnic, (the small one,) where the portly gentleman makes dark science lucid, and where other "entertainers" strive laudably to get fame within their grasp. We have the identical stretched white sheet before us, on which their phantasmagorias have disported; we have the identical red curtains decking it, from which they have discharged their smiles and bowings; we have the identical foot-lights lighted that have made their borrowed cheek-bloom natural, and thrown archness into glances that would otherwise have fallen tame. There is the joy-exciting sheet; there are the dim red curtains; here, within a foot-thrust, are the glowing tin-backed lamps.

Is there anything more? Yes. There is a black-board, on which is chalked where to find the lessons for the day, and the collect, and the text; and there is a pretty carved oak table, with a large prayer-book and Bible on it, and by its side a simple cane-bottomed chair; but with these few items the catalogue is done. About forty deaf and dumb are here, though, apparently quite content. More keep arriving, too, with no effort to stop the shuffling of their feet, (since to themselves it has no noise, and to others no annoyance,) and no head turned when we (and only we!) hear the swinging of the door. Among them are old men and children, young men and maidens; and when they are seated and look around for their acquaintances, their faces light up on recognition, and their fingers begin a rapid speech. They might be members of Parliament or com-

mittee people—all things are with them so literally “motions,” and there is such a perpetual “show of hands.” It is droll, too, to see their manual conversations going on, quite unconcernedly, from opposite sides of the room. To *us* they might be “proposing” (and “accepting” instead of “seconding”) in Sanscrit or old Greek, so utterly incomprehensible are their swift manipulations; but every one else, behind and foremost, can disentangle every word! And yet if these “distinguished (or, at any rate, *distinct*) movers” got up into a dark corner, they would be dumb twice-stricken, for they could not see! They *must* have the light shine upon them, and let their actions be seen before men. They are bound to be “public speakers,” (would a sentence executed on little fingers only amount to whispering, we wonder?) though—and that is so much, happily—not one of them resorts to a hum and ha. New comers, however, passing along the narrow clearing to get to their own form, may blot a word out for them. They have that difficulty. And so we see them craning their necks and throwing aside their hands, and in that way saving the cutting of the thread of their discourse; but all the moving hands at last drop down tranquilly. There is mute attention (only too literally) by all eyes being turned to one spot, for the minister for the day is stepping from behind the red curtain, and walking across the platform to his simple table-desk.

The regularly-appointed clergyman is a “speaking person,” (as the deaf and dumb call *nous autres*,) but, as if to intensify the interest of to-day, he has gone to be interpreter at a deaf and dumb wedding, and this lay-preacher, who is here to take his place, has never heard a sound nor uttered one, and is as deaf and as dumb as are all his congregation. This makes no alteration whatever in the manner of the service. The chaplain would have to be voiceless here, and to adapt himself to the wants of his people, and our present friend can do no more. The other would have worn his professional gown and bands; this has none: but neither needs he any. There is a dignity about him,

an earnestness, a solemnity, that want no silk to be made effective, and that come straight from his own poor imprisoned soul. He has to *act* everything, as it were, (since the system he uses is a mixture of the spelling with our old child-learnt dumb alphabet, and the representation of words, and even phrases, by expressive signs,) and he is so moved by the poetry of the thoughts he is communicating, his head, and arms, and whole body are idealized by it, and he is a picture in every attitude that he assumes. No Oriental could give a painter or a sculptor more delight. He is elevating his hands now to Heaven in close appeal; and now he has no hope left of mercy, and stands there abased. He is resignation, alarm, hope, and tender love; he is gratitude, humiliation, anger, rapture; he turns from adoration to hate, from joy to despair; he supplicates, he mourns, he worships, he disdains, and all with the swiftness and beauty of a man with a fairy gift. All the congregation are standing with him for prayer, (they cannot kneel, nor yet bow their heads, nor do anything that interferes with the freedom of their eyes,) and his fingers are making incessant movements—rapidly, magically, madly—and are adding to his expression considerably more. His arms are out, in, up, down: forward, behind, to the left, to the right; his thumbs are together, apart, making emphasis, upraised; his palms slide rapidly by one another, his little fingers hook; he points, he touches, he makes rings and fists; his fingers go over, under, through, on; and they twirl and twist and clasp, and throw one another away, without a moment's pause. Then his whole *pose* again is trust; and then he triumphs, and then he complains, and then ecstasy carries him completely away. He has scarcely entreated before he confesses he has no right to entreat; he has scarcely sunk under his afflictions before he declares he has received the strength to battle with them, and he is a new man, erect. He shows faith and submission, and abhorrence and rage; he yields, he admits he is unfit; he is tranquil, and then vehement; he adores, and then he scorns; and then suddenly his arms drop by his side lifeless, and he is a picture

still, but this time of nothing but a light-bearded, long-coated, intelligent-faced man.

The congregation sit. It is the time for the reading of the psalm, and they consult the black-board and their Bibles, and turn to the appointed page. Their preacher stretches out his arms to call them to attention, and when he sees they are all heeding him, begins his quick gesturing again. The psalm has been found by us, too, but it is impossible, with the preacher's nimbleness and use and genius, to keep up with him; and the clue once gone, there is no regaining it, and we can once more do nothing but be all-absorbed and look. As may be expected, there is more beauty for us to see still. With the grand words of the Psalmist come grander actions, and we might be in the East, with a type before us of all the fire and imagery of the Hebrew race. Our eloquent mute bows his head, moves his hands above it, as if the waves were fiercely surging there; lays his breast for the storm to touch it; wrestles with his foes; bids them strike him; thrusts them back; pleads for help; exults when it is given; is borne down when it does not come. He shows the wind with its wild rush; the billows as they heave; the arrows of heaven descending; the peace that follows; the obedience that takes it all for good. And through all of it there is no moment's stay in the passion (almost) of his finger-speech. He is still making up the sum of the sublime words he is rendering, with all the velocity of before. His congregation keep their eyes on him intent. He scarcely looks at his book, except now and then to lay one of his charmed fingers upon it (to remind himself, apparently, of how far he has gone) or to hurriedly turn the page. He seems to know all that is coming by heart, and to feel it as though it were his very life. He is on the mountains with the sacred bard; he is beside the waters; he treads the pasture; he scents the flowers; he feels the thorny way. To him the fountains are again opened; he tells of their leaping in the sun, of the dark shades away from them, of the Rock of his heart, of the confusion of his adversaries crowding around. He is a Gamaliel, an Isaiah,

a Job, a Jonah; and Israelitish youths are in procession near him, and he sees the smoke of the sacrifice rise. He is hope again, with his face radiant; he is endurance, with his head bent low; he is victory, with his hands up like a crown; he is a captive, with his body chafing under heavy chains. His arms open to receive sweet messengers; his arms are clasped upon his breast with joy that they are come; he points up, with the sign that means the Ruler; he points to the nail-marks in his palms that are the sign for Jesus Christ. He flings away his hands, to imply disdain; he joins them tight, to signify accord; he spreads them wide, to show universal reaching; he gently waves them to denote the shaking of the earth. Long before we are weary of watching him he has figured all this, and more, and he has stood in cedar groves, and by flocks feeding, and he has drunk in the colors of a Syrian sunset, and melted under the terrors of a desert blaze; and then the last verse of the psalm is finished, and his arms are again by his sides drooping, and his congregation have once more in a mass risen to their feet.

He is leading them to prayer again. He has changed his one book for the other, has opened it, lighted upon his place, and recommenced his whirl of interpretation. Letter succeeds letter, picture follows instantly upon picture, aspect, attitude, expression, *pose*. There is one, there is the other, there are all; and then the prayer is over, and he points to the black-board for the lesson, interprets that, (the people again sitting for it,) signs for them to stand for the collect, and in a few minutes his (necessarily) shortened form of Church service is done. It is now the time for the sermon, and in this is the marvellous power of this physical language still more displayed. As the preacher, of course, is full of his own thoughts, a different set of phrases clothes them, and a different set of symbols is needed to make them known. He cannot be more rapid—one would think he must be panting now, ready to throw himself prostrate upon the floor—he cannot be more picturesque; but he is (or we fancy he is) more homely, and it seems that he has

left poetry, as it were, and is manipulating to us now in prose. He appears to saw, cut, screw, fold, pat, mix, knock, fondle; to hang himself, cut his head off, pull his beard, pluck out his heart, recover, smile, assure every one he is not hurt, blow bubbles, and draw ropes. He appears to tie, twist, twirl, rub, wring, iron, make pies and puddings, hold them up to be admired, congratulate himself that they have turned out so well. There is danger (it seems to us) of a wreck; he sees the peril, cheers on the men, throws a rope to them, rejoices that they see it, hauls it in, comforts us that it is coming, hauls in still more, and hauls and hauls again, and then snaps off the simile, and is as precipitate over something else. He might be a necromancer, making pastime of occult science. He throws a ball and catches it; taps himself upon the chest; defies, vanquishes, shrinks, expands; pulls a hair out of his mouth; conjures; throws up a ball again; throws up three or four; pulls more hairs; turns supposed handles somewhere about his ribs; shakes his hands; smooths them; acts "Nonsense! pooh! presto! gone!"—climbs, sinks; lifts up his thumbs, lowers them; strikes his fore-finger, his second, his third, his fourth; knocks together his palms; blows; opens his mouth, and shuts it; strikes his forehead, his nose, his chin; and yet never once is a buffoon, or crosses the line beyond which is contempt. His emphasis is surprising. He lays his two hands to beat down the air, and does it as if no one could deny the end; he returns to his velocity of fingering, and then presses down the air again; he is busy above his head and towards his feet, and among his puzzlement of long and little fingers; and then is pressing out his outstretched hands convincingly once more. His joints seem multiplied in his miraculous celerity, and we grow giddy with looking at his energy and despatch. There has been no break in his movements, let it be remembered. No Litany has changed the order, with the congregation joining in the response. No grand old hymn has woven every one into harmony, and made but a single soul out of all those here assembled with the beauty of its sacred chords. The preacher

has had to go on and on, with no comma but those his supple hands have marked, and with his whole labor almost one long continuous phrase. No words can successfully paint his intricate action; no pen can describe his entanglings, his involutions, his perplexing and pliant skill.

He is so expert, so facile, so swift, so fleet, he fills us with ever increasing wonder, and forces us to think it is we who are imperfect, and not he who leaves us so deeply impressed. He speaks a different language to what we do; that is what we come to think. We cannot feel that he has no language at all. What is this marvellous fluency of his, this pictured eloquence, that we should feel pity for it as an infirmity, simply because it is something we cannot understand? If a man speaks French, (when that language is a blank to us,) do we think he lies under such a dreadful ban? It is true his fervor is lost upon us, that we cannot be convinced by his vehemence; but we know it is simply that his words are of one sort and ours of another, and that each is puzzled because each has not the other's key. And that is exactly what we have grown into thinking now. Voice is useless here; sound has no vogue; our speech is dying out; and die it may, since there is no longer any purpose for it. But how, then, shall we ask what we want to know? How shall we get at the hearts of these people and show them what is beating in our own? Ah! it is there where we are at fault! It is there where we feel *our* inferiority, and not these people's, whom we have looked upon as deficient because they are deaf and dumb! Would *our* fingers work the magic of this preacher's whom we have come to see? Have *we* this accomplishment he is so perfect in, and with which he is able to move so many souls? No; and so, tongue-tied, and for the moment humbled, we leave our seats now every one else is leaving them, and prepare thoughtfully to go away.

As we step with the tide down-stairs, we see that deaf and dumb church-goers are precisely like church-goers who can speak. They shake hands, they bow ceremoniously, they go up cordially to familiar friends. Here are young

ladies in *chignons* and silk dresses, and with feathers in their hats; and here are smart young men anxious to get to them, and being received with undoubtedly favorable smiles. Here are poorer girls, in merino and less modish *coiffures*, who are for all that comely, and in the glory of their little *posse* of aspirants, too. Here are cheeks that are wrinkled, and cheeks that have satisfactory dimples. Here are coats whose gloss and fit are unexceptionable, and one, just at hand here, with a large tatter of it held on by a pin; and groups form of all sorts of figures, and, with eager hands and fingers, there is a quick interchange of the week's news. We do not notice, of course, the grace and delicacy in the movements now before us that were in the lay preacher's, and that had such a charm. Refinement *is* refinement, and when a man can teach himself Latin and Greek enough to read freely in the New Testament, (as we were told this man had done,) he cannot be quite as ordinary men, but must possess something that will make itself manifest in all he does. We see, perhaps, more gesticulation than we like; more of the exuberant posturing generally associated with persons of undeveloped brain; but when we remember that "deeds, not words," *must* be these people's motto, that "action! action! action!" is their *only* oratory, and not an oration's help, we see the cause of this, and no longer feel displeased. We remember, besides, that we have come to the conclusion that the deaf and dumb speak a foreign language, and that *any* foreign language seems uncouth and gibberish to us when we hear it spoken, and when our own ignorance of it compels us simply to stand the while wondering by. And we remember that in this case we have not even tone and rhythm to be of some interest to us, but are precisely as we should be if we were looking at a platform of demonstrative speakers through a thick pane of glass. We should think actors and spectators very silly, and the vision very tame. But it is different where movement is all, and not a supplement. Volumnia tells Coriolanus, when she urges him to speak, bonnet in hand, to the Romans, his knees "bussing the stones," that

Action is eloquence, and the eyes of the ignorant
More learned than their ears.

And standing thus amidst the deaf and dumb we see her wisdom. We think, too, that all these lips, moving now so aimlessly, were bent over eagerly by mothers once. Prattle was looked for from them that should tell the love, spoken only, as yet, by glances out of little tender eyes. And when we think how drearily must have sunk the mothers' hearts when they knew the pretty baby-words would *never* come, when they knew their own lullabys and croonings *never* would be heard, we are thankful there is a language that can take the place of sound, and that it is possible for that language to be taught. We are only sorry that as so many of the deaf and dumb are found among the very poor, there must be very many who will never have the chance to learn.

Education cannot be had in this country by all classes without help, and there is no government grant, as yet, for scholars who cannot use a vocal A, B, C. But the right can never be hindered long. No doubt this, with other things, will go properly enough—in time.

NOTICES OF PUBLICATIONS.

BY THE EDITOR.

A Clinical Manual of the Diseases of the Ear. By LAURENCE TURNBULL, M. D., Physician to the Department of Diseases of the Eye and Ear of Howard Hospital of Philadelphia, etc. With a Colored Lithographic Plate, and over one hundred Illustrations on Wood. Philadelphia: J. B. Lippincott & Co. 1872. 8vo., pp. 486.

It does not lie within the province of one not a physician to attempt an estimate of the medical value of this work; leaving that task to the medical journals and reviews, we will only say of the book in this respect, that the subject is treated fully, clearly, and candidly, with abundant illustration, and that no extravagant claims are made, while the

author's long experience in diseases of the ear in his private practice and the aural department of Howard Hospital, where he has treated several thousand cases, gives a certain authority to his statements and opinions. His aim is to make the book one of practical value, and "to present the subject of diseases of the ear in such a manner that every well-educated physician may approach their treatment with as much confidence as he would the diseases of the heart, lungs, brain, etc." Many of his suggestions, especially with regard to the treatment of the ear in health and in cases of slight disorder, are easily comprehended by the non-professional reader, and if generally known and observed would prevent deafness in the many cases where it is the result of neglect, carelessness, or injudicious treatment.

The work does not limit itself to directions for the treatment of diseases of the ear, but gives a complete anatomical description of that organ and its functions, illustrated by fine colored lithographs and wood-cuts, and explains the physiology of hearing, the nature, phenomena, and laws of sound, etc. One chapter is devoted to deaf-mutism, and besides describing the condition of the ear in deaf-mutes, and discussing the advisability of medical treatment, sketches the history of deaf-mute instruction, and offers some information and advice as to the various methods of teaching the deaf and dumb; this last being of interest to instructors, as showing how the different methods of teaching strike an intelligent observer, who has had no personal experience of the work. Dr. Turnbull favors "the combined method," which recognizes the importance and value both of the sign-language and articulation. Aside from the value of articulation to the deaf-mute as a means of communication, he is confident that practice in it must improve and develop the lungs and chest. With regard to the medical treatment of deaf-mutism, he says :

"We are of the opinion that, as a general rule, congenital deaf-mutism is not curable. If the child, however, has shown any signs of hearing, or has ever spoken, Wilde, and several good authorities, advise that every possible pains should be taken to keep up the articulation, whether heard by the child

or not. The late Mr. Toynbee's treatment consisted in the use of trumpets, whereby the nervous apparatus may be gradually excited, so as to become sensitive to ordinary sonorous undulations and external stimulants.

"In cases where, by disease subsequent to birth, either the membrana tympani or the mucous membrane lining the tympanum has been thickened, counter irritation over the mastoid process will aid the use of trumpets; and in those where the membrana tympani has been partially or wholly destroyed by ulceration, and where there is a constant discharge of mucus, pus, etc., from the surface of the tympanic mucous membrane, it is desirable to syringe the ears occasionally with a weak astringent, so as to prevent the membrane becoming ulcerated and the bone which it covers carious. The artificial drum, made of gutta-percha, (or a piece of wet cotton,) may be resorted to.

"Triquet, not depending upon his own judgment in treatment, gives the competent conclusions of M. Valade-Gabel: 'The deaf-mute who presents the most favorable conditions for treatment is he whose accidental deafness has supervened at the age at which the child begins to hear and speak, and who still retains some faint evidence of hearing and speech. If the organic lesion, the first cause of the infirmity, be seated beyond the nerve centres; if the child be intelligent and have no brother or sister in the same state as himself; if he be the child of healthy parents, who have no connection by consanguinity, and if he have never previously been under treatment, the chances of cure are numerous; and if all these conditions are met with in the same subject, the chances almost reach to a certainty. On the contrary, they decrease in value in proportion as one or more of these conditions are wanting, and when all are wanting we should entertain scarcely any hope.'*

"Triquet agrees with this opinion of M. Valade-Gabel in every point, and we have already declared our own in the most positive terms. One word more. If the child has shown any signs of hearing and of speech, if deafness has come on in the first months of life under the influence of catarrhal or eruptive fever, hooping cough, coryza or angina, there can be no doubt that medical treatment should be resorted to at the earliest moment possible. But if the child has lost hearing while in the uterus, or after convulsions, brain fever, etc., if he has never given signs of hearing or of speech, however weak those signs might be, the chances of the success of treatment will be extremely uncertain, and we should not conceal that fact from the parents.

"Triquet cites many instances of the so-called cures of deaf-mutes which are to be found in the records of medical litera-

* Introduction à l'Etude médicale et philosophe de la Sourde-muteté. — Paris, 1859.

ture, but on account of certain defects of detail and their not being well authenticated, it is not necessary for us to copy them. We will only refer to one case, which, coming from a gentleman of the highest authority in the profession and thoroughly qualified in this special department, is worth more than all the so-called 'cured cases.' Dr. Von Tröltsch, in the fourth edition of his work on the Ear, writes: 'As a matter of course, medical treatment must be introduced as soon as possible with the systematic instruction. I could relate to you from my practice several cases in which deaf-mutism was obviously prevented, or was checked, or caused to retrograde, when in a condition of development. For instance, there is under my treatment at present a child four-and-a-half years old, who, from the first months of his existence, has suffered from a profuse discharge from both ears, and is conscious only of loud sounds. Until within a few months, when I saw him for the first time, he was able to produce only inarticulate barking and other sounds which were unintelligible even to the mother, so that he was already properly considered a deaf-mute child. Under local treatment the profuse discharge from the ears soon decreased, and with the decrease of the discharge the child manifestly commenced to notice noises which were made around him, and especially the words of bystanders, and also made attempts to imitate what was said. These attempts were encouraged, and the child was employed as much as possible in speaking words and sentences. In this manner I succeeded, not only in decreasing the degree of impairment of hearing, but after a few months the child possessed a tolerably distinct and at any rate quite intelligible language. Without these local applications, and the correct guiding care of those about him, the child would certainly soon have *been counted among the deaf and dumb.*' The same affection of the ear which only makes an adult hard of hearing may deprive the child at the same time of language, and cause him to remain during his whole future life in a lower state of social and mental development.

"Dr. Wm. Kramer, of Berlin, in his "Aural Surgery of the Present Day," published by the New Sydenham Society, London, 1863, p. 136, gives the following case: 'Among the diseases of the middle ear, when the membrana tympani has been whole, I have found "exclusively interstitial exudation" a frequent concomitant, the removal of which, in a completely (acquired) deaf person, produced such recovery of the hearing power in the right ear that the little patient heard and repeated all letters, syllables, words, and short sentences which were spoken with the mouth closely applied to his ear; but he was not on that account fitted to receive education with children in the perfect possession of their senses, nor to be removed from the category of deaf-mutes.' * * * *

"Several other cases have occurred in the author's clinic of young children with otitis externa and media which have not only recovered from the disease, but by judicious after-treatment

have had their voice return and been saved from the fate of the deaf and dumb."

This chapter also contains some interesting information upon the condition of the ear in the deaf and dumb, as revealed by dissection, and a tabular statement of the condition of the ear in sixty-five dissections of deaf-mutes. The morbid manifestations differ very much from each other in these sixty-five cases. "It is highly desirable that careful post-mortem examinations should be made of the ears of deaf and dumb patients, whose cases have been carefully noted during life, that the organ may be compared with the amount of hearing possessed by the patient."

Appended to the book is a very full list of the most important treatises on the ear and its diseases, which have been published from the year 1683 to the present time. The work, as a whole, aside from its excellence as a medical guide, must possess value for all interested in the deaf and dumb, and is certainly worthy of a place in the libraries of our institutions.

School Stories, with Questions. By JOHN R. KEEP. Columbus, Ohio: printed at the Institution for the Deaf and Dumb. 1872. 16mo; pp. 102.

This little book contains twenty-four stories, varying in length from a quarter of a page to six pages. Many of the stories are old favorites, though they have never before been printed in the form here given. They are all interesting, such as hearing children like to read, and deaf-mutes like to see told in expressive pantomime. The language is simple, idiomatic English, adapted to the use of pupils in the second year of their course of instruction. Each story is followed by careful and minute questions, put in a great variety of forms.

All teachers of the deaf and dumb, whatever method they may follow, agree that stories such as these are of great service in imparting language. The pupil may commit them to memory, word for word, or may merely read them over, and then write them out in his own paraphrase, or may translate them into English from the sign-language.

The questions afford a test of the pupil's comprehension of the language used in the narrative, and at the same time teach the methods and forms of interrogation and reply, so difficult for the deaf-mute to master by reason of their confusing use of pronouns and numerous ellipses. Mr. Keep's little book supplies a real want in the course of instruction, and will doubtless meet with general favor.

Articulation for the Deaf and Dumb. Designed for the Use of Parents and School-masters. By CHARLES BAKER, Head Master of the Yorkshire Institution for the Deaf and Dumb. London: Edward Stanford. 1872.

Though Dr. Baker has prepared this chart for the assistance of teachers of articulation, he is far from claiming that articulation is the best manner of instructing the deaf and dumb. On the contrary, he regards it as quite inferior to the sign-method. "More intellectual methods of instruction are now pursued," he says; "articulation does not teach the meaning of words, nor convey knowledge, which is done more effectually by signs."

Dr. Baker does not look upon the instruction of the deaf and dumb in articulation as a work of difficulty, or as one requiring special qualifications on the part of the teacher. "The process is mechanical; skill will be acquired by practice; and the amount of success will depend greatly, but not altogether, on the patient labor devoted to the work.

* * * Time, labor, and patience are the chief requisites to success."

This publication is designed to aid parents and teachers in imparting speech to the deaf and dumb. It is in the form of a large chart, which may be hung upon the wall, and contains diagrams of the various positions of the mouth and other organs of speech in forming the several vowel and consonant sounds. The diagrams are large enough to enable the parts to be seen distinctly, the positions are correctly represented, and the work is well executed. Experienced teachers of articulation, as well as those who begin with the chart as their only guide, will doubtless find it of much assistance in their work.

Elementary Course of Religious Instruction for the Deaf and Dumb. Part III. By J. SCOTT HUTTON, M. A., Principal of the Institution for the Deaf and Dumb, Halifax, N. S. Second edition. Halifax, N. S.: James Bowes & Sons. 1872. 16 mo.; pp. 60.

The first edition of this book has already been noticed in the *Annals*,* but as the present edition has been re-written and enlarged, so as to form in reality a new work, it seems proper to mention it again. It consists of a primary catechism, with references to the Bible; two hundred Scripture texts carefully selected and arranged by topics, and designed to be committed to memory by the pupils; the Lord's Prayer, the Apostle's Creed, and the Ten Commandments. The questions of the catechism are full and clear, and the answers are given whenever they cannot readily be supplied by the pupil himself. A striking variety of type calls attention to special difficulties.

MISCELLANEOUS.

BY THE EDITOR.

The Michigan Conference of Principals.—This conference, held last August, was not mentioned in the October number of the *Annals*, for the reason that we were hoping to be able to publish the proceedings in full in the present number. Not having succeeded, however, in our endeavors to obtain the stenographic report of the conference in time for publication, we must content ourselves with a brief notice.

Though the attendance at the conference was small the discussions were spirited and profitable, and the proceedings when published will be of interest to the profession. The principal topics discussed, as we gather from newspaper reports, were the classification of pupils, institution registers and records, institutions in which the deaf and dumb and the blind are educated together, instruction in articulation, compulsory education, congregate dormitories, recreations, gymnastics, discipline, the best order of daily exercises, and the errors of the United States census. An interesting feature of the conference was an

* Vol. xvi, p. 196.

exposition, by Mr. A. Graham Bell, of "Visible Speech," as applied to the instruction of the deaf and dumb, giving detailed statements of the results thus far reached and practical illustrations of the method. The proceedings of the conference are to be published in connection with the next report of the Michigan Institution.

The Vienna Exposition.—At the great International Exhibition or World's Fair to be held in Vienna next summer, it is desired to have as full a representation as possible of the methods and results of the education of the deaf and dumb in America. The editor of the *Annals*, having been requested by General Eaton, Commissioner of Education, to assist him in the preparation of material for this purpose, respectfully invites the principals of our institutions to furnish him with volumes of their reports, (handsomely bound, if possible,) and photographs and plans of their buildings and grounds; authors of text-books to supply copies of their works in suitable bindings; instructors who have devised special apparatus for teaching certain branches (as, for instance, Dr. I. L. Peet's and Professor Storrs's charts of grammatical symbols) to send specimens of them; and all interested in the subject to favor him with suggestions. As all official mail-matter for the Bureau of Education is carried free of postage within the United States, letters, reports, plans, charts, etc., may be sent to Washington without expense to the senders. Mail-matter thus transmitted should be marked *Official*, and addressed—

BUREAU OF EDUCATION,

Washington, D. C.

(*E. A. F., Deaf-Mute Instruction.*)

The material furnished will be conveyed to Vienna, probably at the expense of the United States, and suitably exhibited in the Exposition. The Austrian Government has appropriated 100,000 florins (about \$50,000 in gold) for the exhibition of apparatus and aids used in the instruction of children deprived of one or more of their senses, and this department will be under the charge of Professor Hübner, an eminent teacher of the deaf and dumb in Vienna. We trust our principals and others interested will respond cordially and efficiently to the invitation here given, so that American institutions may be fairly and creditably represented. As the time is short, all action should be as prompt as possible.

American Institutions for the Instruction of the Deaf and Dumb, January 1, 1873.

NAME.	LOCATION.	Date of opening.	CHIEF EXECUTIVE OFFICER.	Number of Pupils in 1872.	Male.	Female.	Semi-Mute.*	Number of Teachers.†	Male.	Female.	Deaf-Mute.†	Semi-Mute.*
1 American Asylum	Hartford, Conn.	1817.	Edward C. Stone, M. A., Principal.	290	179	111	17	17	10	7	3	2
2 New York Institution	New York, N. Y.	1818.	Isaac Lewis Peet, LL. D., do.	588	349	239	42	30	19	11	7	9
3 Pennsylvania .. do.	Philadelphia, Pa.	1820.	Joshua Foster, do.	292	137	125	32	14	11	3	3	...
4 Kentucky..... do.	Danville, Ky.	1823.	J. A. Jacobs, do.	...	...	...	...	...	...	...	...	...
5 Ohio..... do.	Columbus, Ohio	1829.	Gilbert O. Fay, M. A., Superintendent.	388	225	163	30	22	8	14	9	3
6 Virginia..... do.	Staunton, Va.	1830.	Chas. D. McCoy, Principal.	89	47	42	5	7	7	...	3	1
7 Indiana..... do.	Indianapolis, Ind.	1834.	Rev. Thos. MacIntire, M. A., Supt.	304	167	137	...	14	8	6	3	3
8 Tennessee School	Knoxville, Tenn.	1845.	Joseph H. Ijams, B. A., Principal.	103	59	44	9	8	8	...	2	1
9 North Carolina Institution	Raleigh, N. C.	1845.	S. F. Tomlinson, M. A., do.	119	67	52	8	9	7	2	3	1
10 Illinois..... do.	Jacksonville, Ill.	1846.	Philip G. Gillett, LL. D., do.	309	165	144	25	16	9	7	3	2
11 Georgia..... do.	Cave Spring, Ga.	1846.	W. O. Connor, do.	61	27	34	8	5	4	1	1	1
12 South Carolina	Fulton, Mo.	1849.	N. F. Walker, do.	22	11	11	3	3	2	1	2	...
13 Missouri..... do.	Fulton, Mo.	1851.	Wm. D. Kerr, M. A., Superintendent.	186	90	96	14	8	4	4	3	...
14 Louisiana..... do.	Baton Rouge, La.	1852.	J. A. McWhorter, M. A., do.	54	34	20	4	4	4	...	1	1
15 Wisconsin..... do.	Delavan, Wis.	1852.	George L. Weed, Jr., M. A., Principal.	164	92	72	5	10	8	2	2	1
16 Michigan..... do.	Flint, Mich.	1854.	Robert L. Bangs, M. A., do.	159	87	72	25	11	9	2	6	2
17 Iowa..... do.	Council Bluffs, Iowa.	1855.	Rev. Benjamin Talbot, M. A., Supt.	131	72	59	14	7	5	2	3	...
18 Mississippi..... do.	Jackson, Miss.	1856.	John L. Carter, M. D., Principal.	42	25	17	5	3	3	...	1	1
19 Texas..... do.	Austin, Texas.	1857.	J. Van Nostrand, M. A., Superintendent.	30	20	10	...	3	2	1	...	...
20 Columbia..... do.	Washington, D. C.	1857.	E. M. Gallaudet, Ph. D., LL. D., President.	117	101	16	23	11	10	1	1	3
21 Alabama..... do.	Talladega, Ala.	1858.	Joseph H. Johnson, M. D., Principal.	59	19	40	...	4	3	1	3	...
22 California..... do.	Oakland, Cal.	1860.	Warring Wilkison, M. A., do.	60	35	25	5	4	4	...	1	1
23 St. Bridget's Inst'n, (Cath.)	St. Louis, Mo.	1860.	Sister Stanislas, do.	11	...	11	...	2	...	2	1	...
24 Kansas Institution	Olathe, Kansas.	1862.	L. H. Jenkins, M. A., do.	69	43	26	9	5	4	1	1	...
25 St. Mary's Asylum, (Cath.)	Buffalo, N. Y.	1862.	Sister Mary Ann, do.	58	27	31	4	6	1	5	2	...
26 Minnesota Institution	Faribault, Minn.	1863.	Jonathan L. Noyes, M. A., Supt.	60	36	24	7	5	3	2	1	...
27 Inst'n for Improved Instr'n	New York, N. Y.	1867.	F. A. Rising, M. A., Principal.	80	38	42	22	7	1	6	...	...
28 Clarke Institution.....	Northampton, Mass.	1867.	Miss Harriet B. Rogers, do.	60	32	28	20	5	...	5	...	...
29 Arkansas Institute.....	Little Rock, Ark.	1867.	Elmore P. Caruthers, M. A., Principal.	68	87	31	5	5	2	3	2	...

30	Maryland Institution	Frederick City, Md. 1868.	Chas. W. Ely, M. A. do.	102	65	37	.....	9	5	4	2	2
31	Nebraska Institute	Omaha, Neb. 1869.	Roswell H. Kinney, M. A., Principal	26	12	14	4	3	1	2	1	1
32	Pittsburg Day School	Pittsburg, Pa. 1869.	Archy Woodsides, Teacher	43	23	20	7	2	1	1	1	1
33	Boston Day School	Boston, Mass. 1869.	Miss Sarah Fuller, Principal	55	22	33	10	4	1	1	1	1
34	Whipple's Home School	Mystic, Conn. 1869.	Jonathan Whipple, Jr., do	4	2	2	1	1	1	1	1	1
35	West Virginia Institution	Romney, West Va. 1870.	Horace H. Hollister, M. A., Principal	56	35	21	9	2	1	2	1	1
36	Oregon Institution	Salem, Oregon. 1870.	William S. Smith	24	13	11	6	2	1	1	1	1
36	Institutions in the U. S. ....	.....	Numbers in 35 Institutions	4,253	2,393	1,800	378§	271	167	104	72	35
	National Deaf Mute College,¶ ..	Washington, D. C. 1864.	E. M. Gallaudet, Ph. D., LL. D., President ..	67	67	.....	20	8	8	.....	.....	2
1	Montreal Cath. Inst. (Male) ..	Montreal, Can. 1818.	J. A. Belanger, Principal	75	75	.....	.....	9	9	.....	3	.....
2	Montreal Cath. Inst. (Female) ..	Montreal, Can. 1857.	J. Scott Hutton, M. A., Principal	46	30	16	2	3	3	.....	1	.....
3	Halifax Institution	Halifax, N. S. 1870.	W. J. Palmer, M. A., Ph. D., do	149	97	52	13	8	6	2	2	.....
4	Ontario do	Belleville, Ont., Can. 1870.	Thomas Wild	22	18	4	2	2	1	1	1	.....
5	Montreal Protestant Inst'n	Montreal, Can. 1870.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	Institutions in Canada .....	.....	Numbers in 4 Institutions	202	220	72	17	22	19	3	6	.....

* Under this head are included the semi-deaf and all the deaf who have acquired some knowledge of language through the ear.

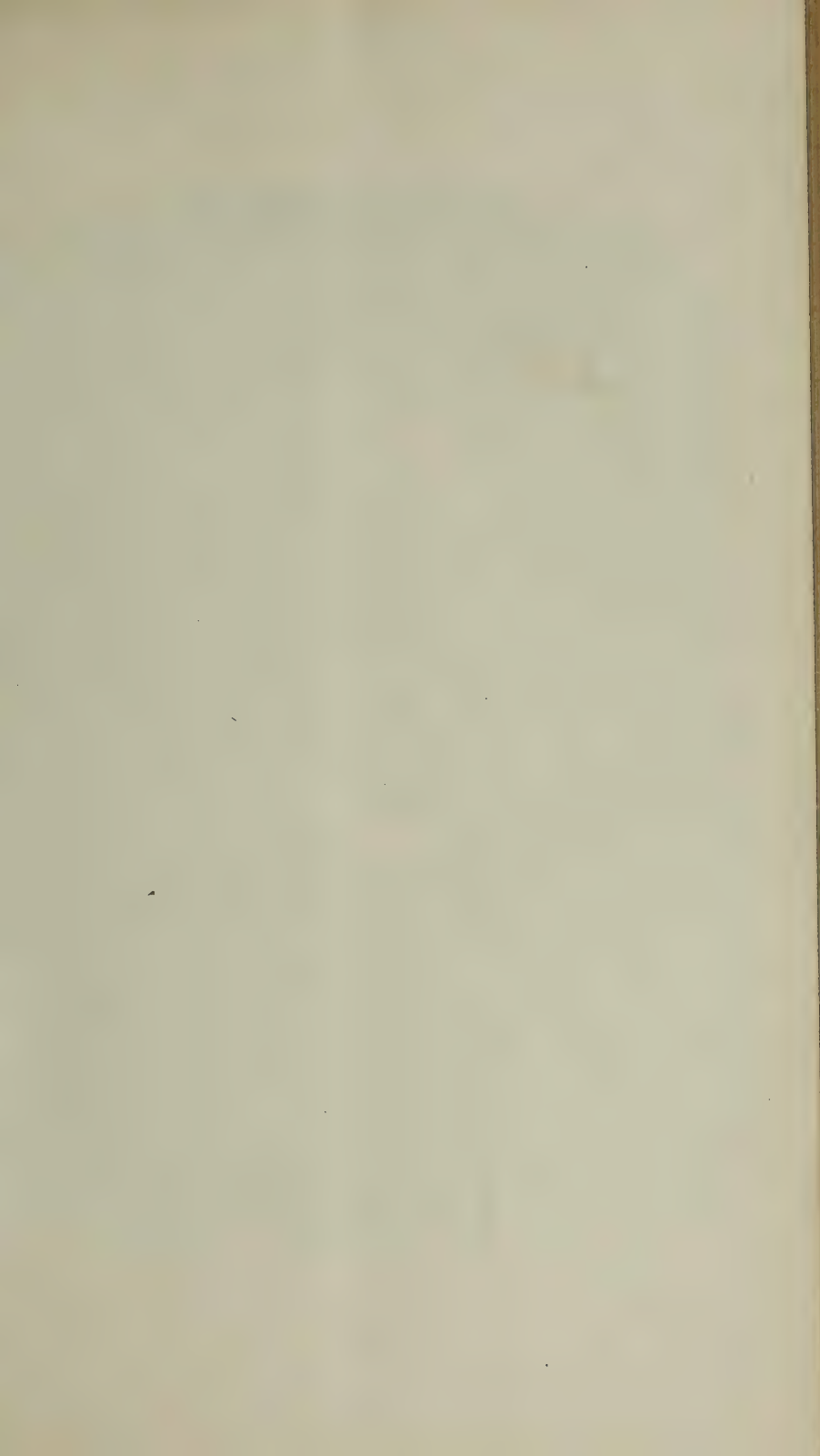
† Including the principal.

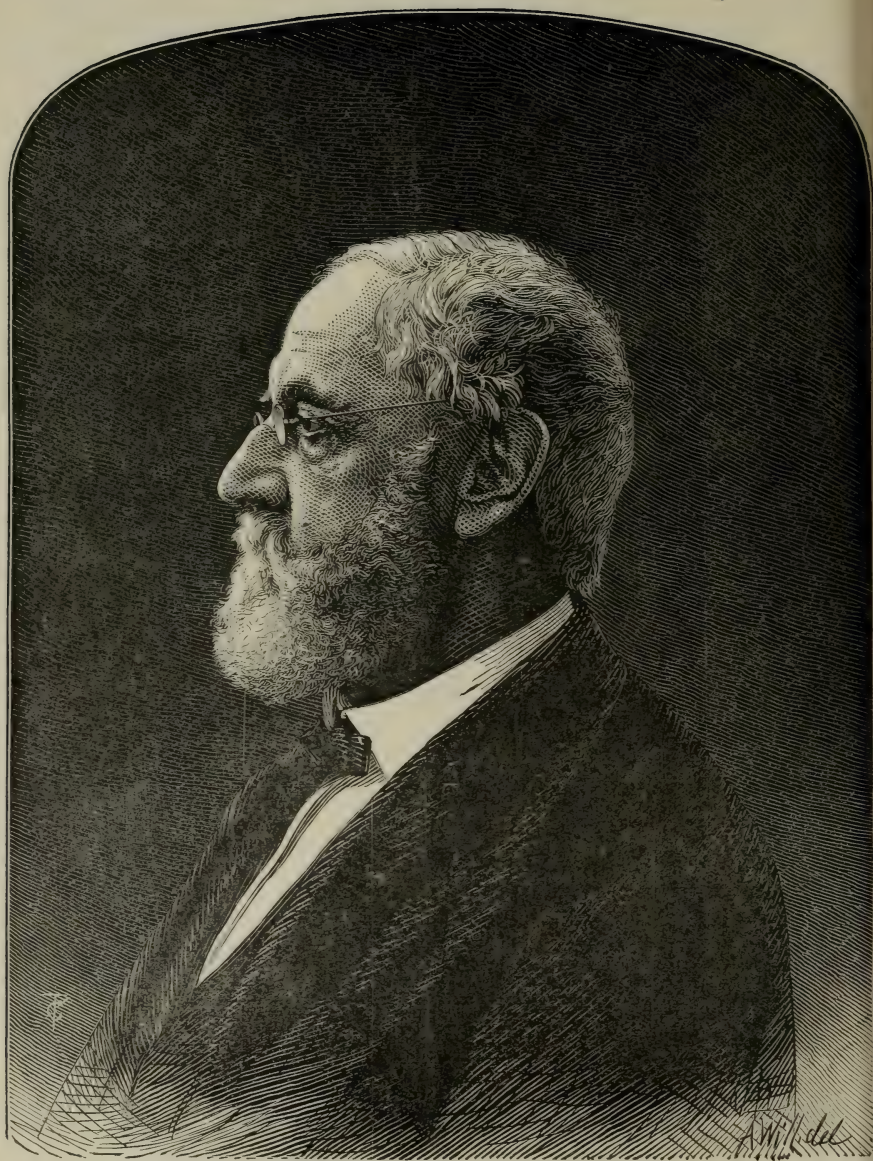
‡ Not including the semi-mute teachers.

§ Number in 31 Institutions.

¶ The National Deaf-Mute College is a distinct organization within the Columbia Institution. Its professors and students are included in the statement of the Columbia Institution given above.

The Tabular Statement of the Institutions.—The number of institutions contained in our tabular statement this year is less by two than last year, as the day schools of Chicago and Cleveland have ceased to exist. In the thirty-five institutions of the United States, from which returns have been received, the number of pupils in 1872 has been 4,253, an increase of 279 over the number in the same institutions last year. In the four Canadian institutions that give statistics the increase is 43, of whom 36 are in the Ontario Institution. In the Georgia, Missouri, Alabama, and Nebraska institutions, the Catholic institutions of Buffalo and St. Louis, and the New York Institution for Improved Instruction, the number of female pupils exceeds that of the males; in the South Carolina Institution and Whipple's Home School the number of males and females is equal; in all the others the males are in excess. The number of males in the thirty-nine institutions of the United States and Canada, from which returns have been received, is greater than that of the females by 681. In the thirty-four institutions that report the number of semi-mutes there are 395 of this class. It is not to be understood that all the rest are congenitally and totally deaf, but that where this is not the case they lost their hearing at so early an age, or hear so slightly, as to have acquired no knowledge of language through the ear. As the whole number of pupils in these thirty-four institutions is 3,975, the proportion of semi-mutes is about 10 per cent. The number of teachers is greater than last year by 20. The relative proportion of male and female teachers remains about the same. The number of deaf-mute teachers is diminished by five, while the number of semi-mute teachers is increased by five. As there have been scarcely any changes in the school hours, evening study hours, vacations, and trades in the several institutions since the report of last year, statistics upon these points are not given in the present number.





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MEMORIAL OF HARVEY PRINDLE PEET, PH.D., LL. D.

[THE eminent position in our profession held by the late Dr. Peet, and the great services rendered by him to the cause of deaf-mute education, make it proper that more than ordinary notice should be taken of his death. It seems fitting also that this periodical, of which he was for a long time one of the executive committee, and whose success in the past is largely due to his efforts, should be the vehicle of the tribute thus offered to his memory.

The present issue of the *Annals* therefore is designed to be a memorial number, and it has seemed desirable that the memorial, instead of being the work of any one man, and looking at Dr. Peet from a single point of view, should come from several representative men of the profession, especially from those who from time to time have been associated with him in various ways, and whose contributions, taken together, make a many-sided and comprehensive tribute.

The biographical sketch by the venerable Mr. Burnet, Dr. Peet's friend and co-laborer during many years, was published in part in *Barnard's American Journal of Education* for June, 1857; it has been revised by the author, and brought down to the time of Dr. Peet's death.

The reminiscences that follow, so far as they come from those who have been personally associated with Dr. Peet in the work of instruction, are arranged chronologically with respect to the

periods of association, and cover nearly the whole of his life and labors in the New York Institution. We regret very much that the pressure of other duties has prevented his old associate and friend, Dr. W. W. Turner, from giving his recollections of Dr. Peet's earlier work in the American Asylum.

The careful review of Dr. Peet's publications comprised in Mr. Syle's paper, while it bears testimony to the extent and value of his literary labors, will be of great service to persons wishing to study the history and methods of deaf-mute education. Within the long period of Dr. Peet's life, there were few discussions upon subjects relating to the deaf and dumb in which he did not take a prominent part; so that this article, with other important matter, gives a summary of the theories of deaf-mute instruction that have prevailed in this country during half a century.—ED. ANNALS.]

BIOGRAPHICAL SKETCH.

BY JOHN R. BURNET, M. A., NEW YORK.

HARVEY PRINDLE PEET was born in the little town of Bethlehem, Litchfield county, Conn., November 19, 1794. Bethlehem is one of the smallest and roughest towns in the State, but has been remarkably favored in the successive ministrations of two great lights of the church, the Rev. Joseph Bellamy, D. D., and Rev. Azel Backus, D. D., both eminent as theologians, as preachers, and as teachers of youth. Dr. Backus, afterward the first president of Hamilton College, conducted in this town a family school of high character, which attracted to Bethlehem several families of rare intelligence and refinement. Under such influences, the intellectual and religious tone of the society in which the earliest years of the subject of this sketch were passed was eminently such as to favor the acquisition of that force of character, amenity of manners, and strength of religious feeling for which Dr. Peet has ever been distinguished; while at the same time, born a farmer's son, and growing up with healthful alternations of study, labor, and free recreation on the rugged and picturesque hills of Litchfield county, he acquired that well-developed frame,

freedom of movement, physical hardihood, and practical tact that have eminently fitted him for the exhausting work of a teacher of the deaf and dumb.

His early advantages of education were few. Working on a farm in the summer, and attending a district school in the winter, and fond of reading at all seasons, like many other New England boys who have worked their own way to education, and in the rough process acquired the power of working their way to subsequent distinction, he began at the early age of sixteen to teach a district school. This employment he continued during five winters, till at the age of twenty-one he had established a character for ability in his profession which procured him the situation of teacher of English studies in schools of a higher class—at first, in that of Dr. Backus already mentioned, in his native town, and afterward in that of Rev. Daniel Parker, in Sharon, Conn. He now saw prospects of higher usefulness opening before him, to the realization of which the advantages of a college education would be important. In the school of Dr. Backus he began his Latin grammar at the same time that he taught a class in English studies. After a delay, chiefly occasioned by want of means, he went, in the fall of 1816, to Andover, and fitted for college in Phillips Academy, under the care of the late John Adams, LL. D., father of Rev. William Adams, D. D., of New York.

As an illustration of the early difficulties that young Peet manfully met and overcame in his pursuit of a liberal education, we mention that, at Andover, he earned a portion of his support by gardening in summer, and sawing wood in winter.

Mr. Peet entered the time-honored walls of Yale in 1818, and graduated in 1822, taking rank with the first ten in his class. He had made a public profession of faith in Christ some years before, and his original purpose was to devote himself to the work of the Christian ministry, but an invitation to engage as an instructor of the deaf and dumb in the American Asylum at Hartford gave him an opportunity of discovering his special fitness for this then new pro-

fession. Thus began that career which has proved so honorable to himself, and so beneficial to that afflicted portion of the human family in whose service his life has been spent.

In embracing this new career, Dr. Peet disappointed many of his friends, who, knowing his rare gifts, had looked forward to a career of great usefulness for him as a minister of the Gospel; but when they came to visit him in his school, and witnessed the solemn impressiveness of his religious exercises, and the rapt attention of the deaf-mutes, to whom, for the first time, the scenes of Bible history and the promises of the Gospel were revealed, they confessed that this missionary work to a class of our fellow-men so long inaccessible to the light of the Gospel was well worthy of all the zeal and talent which the Christian student brought to his task.

The early success and reputation of the American Asylum, which made it, thirty years ago, in popular estimation, the model institution of its kind, was mainly due to the careful and felicitous choice of its early teachers. Mr. Peet's associates at Hartford were all able and most of them distinguished men. When we find that, among such teachers as his seniors in the profession, Thomas H. Gallaudet, Laurent Clerc, William C. Woodbridge, Lewis Weld, and William W. Turner, Mr. Peet was early distinguished in all the qualifications of an efficient teacher of the deaf and dumb, we are prepared for the subsequent eminence he attained. Within two years after he joined the Asylum, he was selected as its steward—an office giving him the sole control of the household department, and of the pupils out of school-hours. The duties of this post were superadded to those of the daily instruction of a class, either alone sufficient to occupy the energies of an ordinary man. Shortly before assuming the duties of steward, he had married his first wife, Miss Margaret Maria Lewis, daughter of Rev. Isaac Lewis, D. D., an estimable, accomplished, and pious woman, who proved in every sense a helpmeet for him.

In the year 1830, the directors of the New York Insti-

tution for the Deaf and Dumb, the second American school of its kind in priority of date, which had been for years losing ground in public estimation, were awakened to the importance of placing their school on higher ground. Seeking for a man whose weight of character, acquaintance with the most successful methods of instruction, and tried efficiency as a teacher and as an executive officer, would invite confidence in advance, and justify it by the results; who could introduce improved methods of instruction in the school-rooms, and, at the same time, order and efficiency in all departments of the institution, their attention was fortunately directed to Mr. Peet, who, almost alone in his profession, had established a reputation for equal and eminent efficiency as a teacher and as the superintendent of an asylum. The offices of principal teacher and superintendent had been separated at the New York Institution, much to the disadvantage of the institution. The title of principal, uniting the two offices, was now tendered to, and accepted by Mr. Peet. He held likewise the office of secretary of the board of directors, till he became its president fourteen years later. The new head of the institution thus had immediate control of all departments of the establishment, with a seat in the board of direction itself. While such an arrangement increases the labors and responsibilities of the principal, it also makes success more fully dependent on the qualities and personal exertions of that officer, and, where the man is equal to his task, will secure higher results by securing unity of will in all departments of the establishment.

Mr. Peet, entering on his new duties in New York on the first of February, 1831, found, in the task before him, abundant need of all his energies and resources. Order and comfort in the household, discipline and diligence among the pupils, and interest and method in the school-room, had to take the place of confusion, negligence, frequent insubordination, and imperfect methods of instruction. The labors which Mr. Peet imposed upon himself at that period were multitudinous and herculean. He practically inculcated that all the inmates of the institution formed one

great family, and himself as its head, taking with his wife and children his meals with the pupils, rose to ask, in the visible speech of the deaf and dumb, a blessing, and return thanks at every meal. He ever gave prompt and paternal attention to the complaints and little petitions of his pupils, and devoted for the first few weeks a large share of his personal attention to inculcating and enforcing habits of order and neatness. He conducted, for the first year or two, without assistance, as he afterwards continued to do in his turn, the religious exercises with which the school is opened each morning and closed each evening. On Sundays he delivered two religious lectures in signs, each prepared with as much care as many clergymen bestow on their sermons, and delivered with the impressive manner, lucid illustrations, and perspicuous pantomime for which he was so eminent. He gave his personal attention to the school-room arrangements of all the classes, and to preparing lessons for the younger classes. He kept the accounts and conducted the correspondence of the institution, and attended the meetings of its directors. He planned numerous improvements in the details of every department of the establishment, down to dividing the classes by screens,* painting the floors, and marking the linen, and superintended their execution. And in addition to all this amount of labor, enough to task the full energies of most men, he taught with his accustomed eminent ability a class during the regular school hours.

Those who were then members of the institution still retain a vivid recollection of the wonderful powers of command which Mr. Peet displayed over the male pupils, many of them stout young men, grown up wild before coming to school, habitually turbulent, and prejudiced in advance against the new principal. Equally vivid is their recollection of the lucid and forcible manner, strongly in contrast with the style of the former teachers, in which he was wont

* When Mr. Peet took charge of the institution there were two large school-rooms, each intended for three or four classes, in full view of each other. These he had divided by screens, till, by enlargement of the buildings, it became practicable to provide a separate room for each class.

to deliver in pantomime a religious lecture or a moral exhortation, or explain a scripture lesson. Where some other teachers were only understood by a particular effort of attention, the signs of Mr. Peet were so clear and impressive, even to those not much conversant with the language of the deaf and dumb, that they could have imagined themselves actual spectators of the events he related, and in his gestures, and the play of his features, traced all the thoughts and emotions of the actor.

The following, preserved by one of his assistants, as the first Sabbath lecture delivered by Mr. Peet in the New York Institution, (February 6, 1831,) may serve as a specimen of the outlines or skeletons of these lectures, which were written out on the large slates at one side of the room, fitted up as a temporary chapel;* the object of preparing and writing out these skeletons being in part to aid the lecturer, and in part to make the lecture an occasion of improvement for the whole school in written language, as well as in moral and religious knowledge. But no words would give an adequate idea of the spirit and power with which these written outlines were explained and illustrated in pantomime. What appeared on paper a mere skeleton, under the hand of the teacher started to life, and swelled out in full, natural, and graceful proportions.

“Matthew xix. 14: But Jesus said. suffer little children to come unto me. and forbid them not. for of such is the kingdom of heaven.”

“The kingdom of heaven is that kingdom of which Christ is king. All belong to it, whether in heaven or on earth, who love and obey him.

“All these enjoy his present favor. and they will enjoy eternal glory with him.

“This is the kingdom to which children who seek the blessings of Christ belong.

“They belong to it because they are united to it.

“1st. in their feelings; 2d, in their services; 3d. in their enjoyments; 4th, in their prospects.”

* There was no room fitted up as a chapel in the New York Institution till Mr. Peet took charge of it.

REFLECTIONS.

"1. Children who indulge in wicked feelings do not belong to the kingdom of heaven.

"2. Children should be kind and affectionate to others, and try to lead their companions to Christ.

"3. Children should not seek their happiness in this world, for they cannot obtain it.

"4. They who are humble and pious will go to heaven when they die, and be happy forever.

"5. If you are impenitent, and do not seek the favor of Christ, you cannot be admitted into heaven."

In delivering a lecture like the above to a congregation of deaf-mutes, for most of whom signs are far more clear and impressive than words, and many of whom are in so rude a state of ignorance that they have never distinctly contemplated many of the ideas which seem simple and elementary to those who hear and speak, it is necessary for the teacher, at almost every word on his slate, to go back to the simplest elements of thought; to define, analyze, and illustrate; to adduce familiar examples, and to prefer always the concrete to the abstract. In this art of adapting his explanations and illustrations to the comprehension of intellects as yet very imperfectly developed, as in other branches of his profession, Mr. Peet was eminent.

The effect of Mr. Peet's labors was soon evinced in a marked improvement in every department of the institution, which from that day to this has been steadily gaining in reputation and usefulness. In the domestic department he was well seconded by his excellent wife, and by her devoted friend, Miss Martha Dudley. In the department of instruction he had the able assistance of Mr. Léon Vaisse, who had been invited a few months previously from the institution of Paris, to which he returned three or four years later.* With this exception, Mr. Peet had for some time to labor alone. The old teachers left within a year or two, and the

* Mr. Vaisse was subsequently for nearly forty years a professor in the institution of Paris, in which he rose by successive steps to the office of *director*, equivalent to our term *principal*. He resigned a few months since. He has made some valuable contributions to the literature of deaf-mute instruction.

selection of new ones was a difficult task, for it is not every clever and well-educated young man who is found, on trial, to possess the mental and physical adaptation necessary to success in the instruction of the deaf and dumb. But in making the selection, Mr. Peet displayed his accustomed tact, and met with his wonted success. Within a few years, the institution could boast of a corps of teachers hardly to be rivalled for zeal, talent, and special adaptation to their profession, by those of any similar institution in the world.*

In proportion as Mr. Peet succeeded in training up an efficient corps of teachers, his labors were lightened. Each teacher, as he acquired sufficient skill and readiness in pantomime, conducted the religious exercises in turn, and took charge of the pupils out of school in turn. And after the first three or four years, the principal was relieved from teaching a class personally, to enable him to superintend more at ease the general course of instruction and the general affairs of the institution. At a much later day, however, he voluntarily assumed the instruction of the highest class for several terms, in a temporary scarcity of experienced teachers.

Mr. Peet was soon called to experience a bereavement of the heaviest kind. His amiable, intelligent, and accomplished wife for seven years had added to the cares of a

* Among the associates of Dr. Peet in the New York Institution at various times were D. E. Bartlett and J. R. Keep, now of the American Asylum: F. A. P. Barnard, D. D., LL. D., president of Columbia College: B. M. Fay, formerly principal of the Michigan Institution: George E. Day, D. D., professor in Yale Theological Seminary: Joseph R. Haven, D. D., professor in Chicago Theological Seminary: Rev. S. R. Brown, D. D., missionary in China and Japan: J. A. Cary, formerly superintendent of the Ohio Institution: A. L. Chapin, D. D., LL. D., president of Beloit College: Rev. A. L. Stone, D. D., of San Francisco: Jacob Van Nostrand, principal of the Texas Institution: Samuel Porter and Edward A. Fay, professors in the National Deaf-Mute College: Rev. Thomas Gallaudet, D. D., rector of St. Ann's Church for Deaf-Mutes, New York: Egbert L. Bangs, principal of the Michigan Institution: Warring Wilkinson, principal of the California Institution: H. H. Hollister, principal of the West Virginia Institution, and others who are now able and useful ministers of the Gospel. Of those above named, all except Mr. Cary are still living.

young family the duties of matron at the American Asylum, and, on removing to New York, continued to devote herself to the general oversight of the female pupils and of the domestic department, though relieved by her friend, Miss Dudley, of much of the actual labor. There is reason to fear that her warm sympathy with the efforts of her husband to elevate, in every sense, the institution with whose interests and success he had identified himself, led to greater exertions in her own department than her feeble frame could support. A constitutional tendency to consumption became developed in the year following their removal to New York, and soon assumed that character of beautiful yet hopeless decline so familiar to thousands, whose dearest connections have travelled this gentle declivity to the grave. Removed to her native air in the vain hope of relief, she died at Hartford, on the 23d of September, 1832, leaving three little sons—an infant daughter having been taken to heaven before her. Those who watched by her death-bed remember with deep and solemn interest, that in the last moments of life, after the power of speech had failed, the dying one was able to spell distinctly the word MOTHER with her weak, emaciated fingers. Did she mean to recall to her weeping sister her promise to be a *mother* to the babe left motherless; or to convey that the sainted spirit of her own mother, who had departed six years before her in the triumphs of faith, was hovering to welcome her on the confines of the spirit land? In the words of Lydia Huntly Sigourney, whose little poem, “The Last Word of the Dying,” commemorates this touching incident:

“We toil to break the seal with fruitless pain,
Time’s fellowship is riven, earth’s question is in vain.”

But in view of this and other instances in which dying persons have been able to make intelligible communications by the aid of the manual alphabet, after the power of speech has failed, we would suggest that a familiarity with that alphabet may be of priceless value in many exigencies easy to be conceived, but impossible to predict.

Three years after, Mr. Peet formed a second connection,

by marriage, with Miss Sarah Ann Smith, daughter of Matson Smith, M. D., whose wife was a lineal descendant of the first Mathers of New England.

As soon as the success of the institution, under its new head, had become such as to invite public confidence, successful application was made to the legislature of the State for an increase of pupils and appropriations; and there was at the same time an increase of those pupils from families of better circumstances, who are attracted by the reputation of a school. The New York Institution became, within a few years, the largest on this side of the Atlantic; and gaining slowly but surely, since that time, in the confidence of the public and of the legislature, it has overtaken and passed even the institution of London, long the largest in the world.

Mr. Peet did not confine himself to exhibiting such marked results in his school as should challenge investigation and inspire confidence. Feeling it his duty to use every means to secure the opportunity of a good education to all the deaf and dumb children of the State, he labored, by his annual reports and other publications, to diffuse correct information, and keep alive an interest in the cause of these unfortunate children. Almost every year he visited Albany to urge the claims of his institution on the legislature; and on such occasions, his tact and knowledge of the world, not less than his distinguished reputation, gave him much personal influence among the members of the legislature. It was customary, when an application on the part of the deaf and dumb was before the house, to exhibit the attainments of a few of the pupils, by special invitation, in the legislative hall itself—a scene always of great interest to the members, and which never failed to convince the most incredulous of the benefits of instructing the deaf and dumb. On one occasion, in order to awaken in remote parts of the State an interest which might (and did) result in sending to school several promising deaf-mutes, hitherto kept in heathen ignorance by the apathy or want of information of their friends, Mr. Peet travelled with a deputa-

tion of his teachers and pupils from the Hudson river to Buffalo and Niagara, holding exhibitions at the principal places on the route. A lively and graphic report of this tour is annexed to the twenty-sixth annual report of the institution, from which we make an extract, bearing on a question that has been raised by some, as to the propriety of public exhibitions of the pupils of such an institution :

“ From the above brief sketch, it will be seen that we held exhibitions in seventeen of the principal cities and villages west of Albany, in five places repeating our exhibitions at the urgent request of the citizens. The audiences assembled were estimated at from two hundred to two thousand. Probably in all from ten to fifteen thousand persons, many of them among the best educated and influential citizens of the State, have had the opportunity, through this excursion, of acquiring correct notions on the subject of the instruction of the deaf and dumb, and of witnessing, many of them for the first time, practical illustrations of the success attained under our system.

“ Many thousands besides, who could not personally attend, have had their attention awakened to the subject, and have acquired some degree of correct information, through the notices of our exhibitions published in the papers of the various places we visited. We have reason to believe that the results have been highly beneficial, and that the large accession of promising pupils to the institution within a few weeks after our tour is, in part, attributable to the interest and attention which we were the means of awakening.

“ The obstacles which the friends of deaf-mute education have to encounter are partly the prejudices of many, formed from occasional instances of partial failure in instructing deaf-mutes under unfavorable circumstances : partly the incredulity of others, who refuse to believe, upon report, facts as contrary to their own previous experience as is the congelation of water or the lengthened day and night of polar regions to that of an inhabitant of the equator : and partly the indifference with which the great bulk of mankind regard matters which no peculiar circumstances have pressed upon their personal notice.

“ There are thousands who regard the deaf and dumb with some degree of compassion, and hear of the efforts made in their behalf with cold approbation, but the subject has never taken hold of their feelings. They hear of deaf-mute children in the families of their acquaintances ; perhaps they meet them : they advise their being sent to the institution ; but the advice is too coldly given to turn the scale, when, as is too often the case, there exists disinclination on the part of the parent or guardian. If we could infuse into the mass of our benevolent and educated men a more heartfelt interest in this subject ; if we could

prompt each to warmer and more earnest efforts in those cases that may come to his knowledge: if, finally, the pastor or magistrate or professional man, in whose neighborhood there may be a deaf-mute growing up in ignorance, and in danger of being left for life without the pale of social communion and of Christian knowledge, could be fully impressed with the momentous consequences at stake, and fully apprised of the only and easy means of escape, then we should have less cause to complain that parents and guardians, often uneducated themselves, take too little thought for the education of their deaf and dumb children.

“In this point of view, we trust our excursion has, in many places, sown the seed which may hereafter spring up and ripen to a gladdening harvest. Many men, now wielding or destined to wield an important influence, attended our exhibitions. In two or three places the opportunities of this kind were peculiarly favorable. In Auburn, for instance, the students of the Theological Seminary were present at our lecture and exercises. These young men are destined to go forth into the various cities and towns in the State, to exert a high moral and intellectual influence, and *ex-officio* to take the lead in benevolent undertakings. That this body of men should be correctly informed of the extent to which the instruction of the deaf and dumb is practicable: that they should be warned against the blind enthusiasm, that, aiming at too much, fails of accomplishing the greatest practical good: and that their feelings should be interested, in view of the striking intellectual, moral, and religious contrast between the educated and uneducated deaf-mute, is a great point gained, and can hardly be too highly appreciated.”

When Dr. Peet (I find it easier to speak of him by that now familiar title, though the degree of LL. D., conferred on him by the regents of the University of New York, is of somewhat later date than the period we are now speaking of) had been able to collect around him such a corps of well-trained teachers that his daily attention to the routine of instruction was no longer required, he turned his attention to the preparation of a course of instruction, or a series of language lessons, adapted to the peculiar circumstances of a class of deaf-mutes—then a very serious want. Several attempts, under the spur of urgent necessity, had indeed been made to provide such lessons, and in two or three instances they had been printed, to save copying with a pen; but these little books were of a character unsatisfactory even to their authors, and, such as they were, copies were

no longer to be procured in sufficient numbers for a school. Dr. Peet, therefore, finding nothing he could use, and little even to improve upon, beyond some hints in the French work of Bébien and the manuscript lessons previously used in his own school, was obliged to go back to the first principles of the art, and following these to their logical results, in the light of his long experience and intimate acquaintance with the peculiarities of the deaf and dumb, he produced a course of lessons on a plan in many respects entirely new. The first fruit of his labors, after being tested for a few months in his own school, was published in the spring of 1844, with the title of "A Vocabulary and Elementary Lessons for the Deaf and Dumb." It met (says Dr. Peet, in the preface to the second edition) with "favor and success beyond the author's hopes," being received with a satisfaction amounting in some cases to enthusiasm. The first edition being exhausted much sooner than was anticipated, it was revised with great care, and under the title of "Elementary Lessons, being a course of instruction for the Deaf and Dumb, Part First," has gone through two or three editions, and is still the only text-book in general use for the younger classes in the American institutions for the deaf and dumb. Orders have also been received for copies to be used in British schools; and missionaries, whose task, like that of the teacher of deaf-mutes, is to teach the first rudiments of the English language to intellects but imperfectly developed, have found Dr. Peet's Elementary Lessons a very suitable text-book for that purpose.

The success of the First Part encouraged the author to proceed with his undertaking of supplying that total want of acceptable elementary books which had so seriously increased the labors of teachers of the deaf and dumb. A Second Part was published in 1845, a little volume of Scripture Lessons in 1846, the new edition of the First Part, already mentioned, the same year, and finally a new Second Part, by which the Second Part published in 1845 became the Third Part, appeared in 1849. A carefully-revised edition of Dr. Peet's Scripture Lessons appeared in the lat-

ter year, and being equally well adapted to the use of children who hear, besides the edition for the use of the deaf and dumb, a large edition was put in general circulation by the American Tract Society.

The "Course of Instruction" thus consists of four volumes, of which the Elementary Lessons and the Scripture Lessons have been received with the most general approbation. Later, Dr. Peet employed his leisure upon a School History of the United States, which, while its simplicity and perspicuity of style adapt it to the use of the deaf and dumb, is equally well adapted for children who hear. In this, special care was taken to secure *accuracy* of statement, as well as to preserve the interest by the choice of incidents.*

In order to take all Dr. Peet's series of school-books for the deaf and dumb in one view, I have anticipated the order of time. The institution was, by its charter, placed under the care and control of a board of directors, composed of twenty-five of the most respectable and intelligent citizens of New York, men whose judgment might aid the principal in the management of the institution, and whose social and political influence had much weight with the legislature in its behalf. The presidency of this board was successively filled by such men as DeWitt Clinton, Samuel L. Mitchell, LL. D., Rev. James Milnor, D. D., and Robert C. Cornell. On the death of the two last, which occurred within a few months of each other in the spring of 1845, the title of president was, by general consent, and as a just tribute to his eminent worth and services, conferred on Mr. Peet; the first, and I believe the only case, except the later one of Dr. E. M. Gallaudet, president of the Columbia Institution and National Deaf-Mute College, in which the principal or superintendent of such an institution is also president of its board of directors or trustees. (The degree of Doctor of Laws was conferred on Mr. Peet, as I have said, by the

* We omit from Mr. Burnet's article the exposition of Dr. Peet's course of instruction which follows here, and the sketch of his literary labors given elsewhere, as these are fully treated in another paper.—ED. ANNALS.

regents of the University, three or four years later; the degree of Doctor of Philosophy was conferred by the National Deaf-Mute College in 1870.) This change of title brought no change in the immediate relations of Dr. Peet to the institution. He continued, as he had ever done, to reside in the building, to fulfil the duties both of the head of the institution and the head of the family, and to give his personal attention and the benefit of his great experience in all cases of difficulty in any department of the establishment.

It was, I think, early in the year 1844 that the Hon. Horace Mann, returning from a visit of inspection to the educational institutions of Europe, especially of Germany, published his report, in which he took occasion to say that, in his opinion, the "institutions for the deaf and dumb in Prussia, Saxony, and Holland are decidedly superior to any in this country." On examination, it appeared that the distinguished author of this report, who, with all his eminent zeal for the cause of education and admitted ability, was too apt to jump to conclusions upon insufficient premises, had formed this opinion upon a very superficial examination of the German schools, and no examination at all of our own. Still, the specific point of difference on which his opinion was based, that the German teachers teach or attempt to teach their deaf pupils to speak, while ours had long since formally relinquished that attempt, was *prima facie* such as to make an impression on the public mind, ever moved by novelties, and prone to believe in the marvelous. Though, therefore, all the evidence we then had went to show that even in the German language, much more favorable to such an attempt than our own, the teaching of articulation to the deaf and dumb seldom yielded any results of real practical value, while it certainly involved a heavy waste of time and labor, still it seemed proper to ascertain by actual examination whether we were in fact so far behind the German or other European schools that, if there were valuable lessons to be learned, we might learn them, and if not, that our institutions might retain in the

public estimation the place they had so hardly won. To this end, each of the two oldest and largest American institutions for the deaf and dumb sent an agent to Europe. The American Asylum sent its late esteemed principal, Mr. Weld, and the New York Institution sent one of its former instructors, Rev. George E. Day, afterwards a professor in Lane Theological Seminary, and now of Yale Theological Seminary. The reports of these gentlemen, made after very full and candid examination, were justly held to be conclusive that, on the whole, the results of our system of instruction were superior to those obtained in the German schools. Mr. Peet's letter of instruction to Mr. Day, prefixed to the report of the latter, (see twenty-sixth annual report of the New York Institution,) is esteemed a model paper of its kind, and shows how fully and clearly its author understood, in advance, all the bearings of the question at issue. Seven years later, (in the spring of 1851,) Dr. Peet himself, with his eldest son and three of his pupils, visited Europe on a similar errand, and made a voluminous report on the condition of the European schools he visited, and on the various systems of instruction he found in use, which is one of the most valuable and interesting documents of the kind extant, and at the same time a graphic and agreeable book of travels. While in London on this occasion, he took part in the first annual convention of British teachers of the deaf and dumb.

The first convention of American instructors of the deaf and dumb had been held at the New York Institution a year before this time, (in 1850,) and Dr. Peet returned from Europe just in time to attend the second convention, held at Hartford in August, 1851. Three other conventions were held before the late war, (the interval having been changed from one to two years, and two meetings postponed a year from unfavorable and unforeseen circumstances.) At all these conventions, Dr. Peet, to whose exertions and influence the holding of the first convention was mainly due, took a leading part. Besides, in the discussions that arose, freely imparting the benefit of his rare experience to his

younger brethren, papers of great value, and prepared with much labor and research, were presented by him at each convention, and published with its proceedings. Of these papers, I will particularize that on the "Origin and Early History of the Art of Instructing the Deaf and Dumb," presented at the first convention, and also inserted in the *American Annals*, (vol. iii, page 129,) and the "Report on the Legal Rights and Liabilities of the Deaf and Dumb," presented at the fourth convention. The former of these papers corrects several errors of Degérando, hitherto almost the only authority usually referred to on that subject; and the latter has been pronounced by competent judges a valuable contribution to our legal literature, and supplies information which hitherto could be obtained only by very extensive and laborious research.

At the fifth convention, held at Jacksonville, Ill., in August, 1858, Dr. Peet again took a prominent part, and read a paper, extending to more than sixty pages, bringing the history of the art down to our own times. The war caused a suspension of these conventions for several years. When they were renewed, Dr. Peet, though he had in the meantime retired from the active duties of his profession, still took a leading part in them. He presided with dignity and ability over the conference of principals at Washington in 1868, and undeterred by a journey of a thousand miles, at the age of seventy-six, took an active part in the seventh convention, held at Indianapolis in August, 1870.

The increase of the New York Institution in numbers, while under Dr. Peet's care, has no example in the history of kindred institutions. When he took charge of it in 1831, after it had been in operation 13 years, the number of pupils was 85. Under his management, the number had increased to 134 in 1833, to 160 in 1836, to 200 in 1845, to 290 in 1855, and to 439 when, after 36 years of arduous labor, Dr. Peet retired, in 1867.

When Dr. Peet first entered on his duties as principal, the institution occupied a building on Fiftieth street, now part of the buildings of Columbia College, then quite out

of town, and surrounded by orchards, woods, and swamps. As the increase of numbers demanded more room, these buildings were three times enlarged, but finally the pressure of population and the opening of new streets through the grounds, making them unsafe for the necessary out-door exercise of several hundred children, made a removal necessary. Thirty-seven acres were purchased on the Hudson river, at One hundred and sixty-second street, near the historic battle-ground of old Fort Washington, and buildings put up capable of accommodating 500 pupils. The increase of pupils soon justified this liberal provision. The institution was removed to its new site in December, 1856, with 300 pupils. For several years past the average number has exceeded 500.

Dr. Peet thus reached the accomplishment of his last great labor—the planning and erection of buildings that make the New York Institution, in that respect as in all others, a model one of its kind. In this, as in other labors in behalf of the deaf and dumb, he was ably seconded by an intelligent and energetic board of directors. From the mode of election, by a few life members and subscribers, and the gratuitous nature of their services, the directors of the New York Institution were men attracted together by benevolent interest in the cause of the deaf and dumb, and respect for and sympathy with the character of their president and principal. Hence it is that they were so ready to appreciate and encourage his labors. In this matter of the erection of the new buildings especially it required zeal, foresight, and sanguine trust in the future, to prevent that perfection of plan and proportions so admirable in the new buildings from being sacrificed to a severe though temporary pecuniary pressure.

The large debt incurred in the erection of the new buildings was about three years since liquidated by the sale of little more than one-third of the grounds. Thus Dr. Peet had the satisfaction of seeing this splendid property, now worth not much less than a million dollars, secured for the benefit of the deaf and dumb of New York for all time to come.

In 1867, the semi-centennial year of the New York Institution, Dr. Peet, after forty-five years of arduous labors, thirty-six of them as the head of the New York Institution, retired from the active duties of his profession. The event was marked by the greatest gathering that the world has ever seen of educated mutes, who, in taking leave of their teacher and life-long friend, testified their esteem and gratitude by the presentation of a beautiful and costly service of silver. Both the gift and the manner of it attested the moral and intellectual elevation attained by this class of persons, who at no very remote period were held by the wisest philosophers and soundest theologians to be utterly incapable of instruction.

In the presence of six or seven hundred educated mutes, one of their number, in the name of the rest, made this presentation in a graceful speech, "as a testimonial," to quote his own words, * "of our high appreciation of your long devotion to the instruction of deaf-mutes, and our gratitude for the benefits of education which you have bestowed on us."

Well might Dr. Peet reply as he did:

"With emotions too deep for utterance. I accept the testimonial which you have so gracefully and kindly presented to me. It shall ever be cherished as one of my most precious possessions, and as such be transmitted to my descendants. The sight of it will ever awaken pleasant feelings, reminding me of this, one of the happiest days of my life—the crowning day of more than forty-five years of zealous labor in behalf of the deaf and dumb. Retiring now to seek the repose, grateful after long labor, necessary at my advanced age, this memorial will be to me a proof that I have not lived and labored in vain; that the deaf and dumb in whose service the best years of my life have been spent have minds and hearts capable of the very highest cultivation, as is testified by their warm gratitude to their teachers, and their graceful mode of showing that gratitude."

Though retired from active service, Dr. Peet retained till his death the title of Emeritus Principal, living in the "man-

* The deaf-mute (Mr. John Witschief) selected as the *orator* on this occasion wrote out his speech in words, but delivered it in signs, and Dr. Peet replied in the same way.

sion house " near the institution, aiding his successor with his counsels, and occasionally taking the place of the latter when necessarily absent. Till within a few months he was an active member of the board of directors of the institution, hardly ever missing one of their meetings. He has several times taken part in the annual examinations of the classes of the institution, acting no longer ago than last June as the chairman of the committee to make that examination—a duty involving much labor for a man of his years.

For some years past Dr. Peet's once vigorous constitution has been slowly giving way. Rheumatic affections nearly deprived him of the power of using the manual alphabet of the deaf and dumb, and made it difficult to walk. A few years since he was threatened with blindness—a calamity averted by a successful surgical operation. Yet he continued his labors in behalf of the deaf and dumb whenever he could aid their cause by his voice or pen. He experienced benefit to his rheumatic affections from a residence at Avon Springs, N. Y., in the summer of 1871, but a second visit to those mineral waters in 1872 failed to give the hoped-for relief. During the closing month of the last year he had been confined to his bed, but his medical attendants did not consider his case alarming till within a few hours of the end. Then the heart, it is believed, was affected, and by its suspended action induced congestion of the lungs.

Dr. Peet was three times married. We have spoken of his first wife, who died in 1832, leaving three sons, who all became able and accomplished teachers of the deaf and dumb. The bright promise of usefulness of the two younger was cut off by premature death eleven years ago. The elder and only surviving son, the present principal of the institution, (Isaac Lewis Peet, LL. D.,) is carrying on with rare zeal and ability the work to which his father so long consecrated his life and talents.

In each of his three marriages Dr. Peet was singularly fortunate in the intellectual endowments, moral virtues, and Christian graces of his chosen partners. His second wife, a daughter of Dr. Matson Smith, of New Rochelle, Conn.,

with whom he lived for nearly thirty of his best years, left fragrant memories with all who knew her. And the kind care of the estimable lady who was his third wife greatly promoted the comfort of his declining years.

Dr. Peet was a man of large and athletic frame, of commanding presence, and remarkably pleasing manners. His powers of command were wonderful. Young men were often brought to his school who had grown up without instruction and without restraint, and were as wild and reckless as savages, but they submitted at once to his authority. As a teacher, Dr. Peet's great success was due to the clearness and impressiveness of his pantomime, to his power of awakening in his pupils an enthusiasm that fixed attention and made study easy, to his happy facility in seizing on the most important points, and to the aptness of his illustrations. His lessons were well planned, clearly understood, and well remembered by his pupils. Thus there was no waste of labor. And in a branch of instruction so intrinsically difficult as that of a deaf-mute in written language the highest success can only be attained by a teacher who has the faculty of exciting enthusiasm, and of leading his pupils in a progress that leaves no unconquered or but partially conquered territory behind.

By birth and education a New England Puritan, Dr. Peet ever took a deep and warm interest in all ecclesiastical matters. He was for many years a ruling elder and one of the main pillars of the Presbyterian church at Washington Heights, and was ever a warm friend and promoter of missions at home and abroad.

The numerous personal friends of Dr. Peet have a lively recollection of his social qualities. He had a remarkable fund of humor, which overflowed in his conversation and in his private correspondence.

From this sketch of Dr. Peet's public life, his character as a Christian gentleman, as the head of an institution, as a teacher, as an accomplished master of the language of pantomime, as a leader and energetic laborer in all movements for the benefit of the common cause of deaf-mute

education, and as the author of the best existing series of works in our language—perhaps in any language—on the instruction of the deaf and dumb, though inadequately set forth, will, I trust, be apparent to the reader. But to his many friends, and to the hundreds of deaf-mutes who, educated under his care, learned to love and honor him as a father, such a portraiture will appear not only feeble but very incomplete, as omitting one of Dr. Peet's most prominent traits of character—his warm benevolence of heart—of which the best illustration is the filial affection with which he was regarded by his pupils, the warm and active interest he ever took in their temporal and spiritual welfare, and the aid he was ever ready to give to any of his former pupils who deserved and stood in need of his assistance. When dismissing his pupils at the end of their course, he was wont to give each a little letter of advice, in which, encouraging them to seek his aid in any future season of trouble, he said: "Come to us, I repeat, with the confidence of children to a father. We shall be ever ready to redress your wrongs, to seek for you employment that shall insure for you comfort and respectability; and in those afflictions which only time and Providence can relieve, to afford the sympathy and advice that may inspire consolation, patience, and cheerfulness." And the instances are not few in which this pledge was fulfilled.

When, on the 19th of November last, the family connections and a few old friends of Dr. Peet met at a congratulatory dinner, celebrating his seventy-eighth birthday, the venerable man bore his part in the proceedings in a manner to suggest years yet to come of comfort and usefulness. It was, indeed, remarked by one of the elder guests that while such an anniversary reminded them all that they were drawing nearer to the dark river beyond which the eye of faith sees the shining ones waiting, and the towers of the New Jerusalem in glorious prospect, their venerable host seemed to be a few steps in advance. Yet all felt that no one could foresee whom the Master might first summon. A few brief weeks, and the summons came. It was not unexpected; and as far as man can judge, we may reverently believe that

the reception of our departed friend was like that of him to whom it was said: "Well done, thou good and faithful servant. Enter thou into the joy of thy Lord."

The funeral services were held in the spacious chapel of the institution, on the 6th of January. The halls of the institution and the walls of the chapel were draped in black. A portrait of the great and good departed, hung round with crape, looked serenely on the throng that had assembled to pay the tribute of respect and affection, and take their last look at the grand old face. Among those present were many former graduates of the institution, some of them from a distance, and several former associates of Dr. Peet, including Dr. Gallaudet of New York, Dr. Brinsmade of Newark, and Dr. Day of Yale College. Several members of the board of directors were also present, three of whom, Rev. Dr. C. A. Stoddard, long pastor of the church to which Dr. Peet had belonged, Rev. Dr. Adams, president of the board, and Rev. Dr. Gallaudet, spoke eloquently from personal knowledge of their departed friend and associate.

With a crown of flowers on the head, a wreath of autumnal leaves and a little sheaf of ripe wheat in the hand, the mortal remains of Harvey Prindle Peet were conveyed to Hartford, and interred by the side of his first wife and of his two sons, Edward and Dudley, there to await the fullness of time.

REMINISCENCES.

I.

BY DAVID E. BARTLETT, M. A., HARTFORD, CONN.

THE name, character, deeds, and reputation of Dr. H. P. Peet as one of the prominent men in the profession of deaf-mute instruction in our country are too well and widely known, both inside and outside of our profession, to need any words of mine to increase his fame. But the editor of the *Annals* has asked me for some expression of regard for him in the way of personal recollections, and I cordially give my contribution.

My earliest recollection of Dr. Peet dates back to the time when, myself a school-boy at the grammar school in the city of Hartford, I used often to see him driving a remarkably vigorous mettlesome white horse, in a remarkably voluble four-wheeled curricule, through the streets to and from Asylum Hill. He was at that time one of the teachers in the American Asylum for Deaf-Mutes, and also steward of the Asylum. Among the citizens of Hartford at that time, no one of an observing turn of mind, I will venture to say, failed to gain the impression that the man who drove that horse and curricule was inclined, and moreover destined, to make an impression upon whatever section of the world it might please Providence to place him in. The result has abundantly proved that such an impression was not a mistaken one.

My next recollection of him dates from a certain morning in September, 1828, the morning after I had taken my sheep-skin at Yale. Full of an intention of looking for a situation as teacher off somewhere southward, and having the day before received a cordial invitation from a friend in New York to come down and pass a few days with him, and perhaps find a situation in that city or in its vicinity, I was rushing speedily out of the college yard, leaping the fence, and pushing with hurricane haste for down town, when I was called to a sudden halt by one of my classmates, and introduced to a grave and dignified gentleman, who inquired if I would like to become a candidate for the situation of instructor of deaf-mutes in the American Asylum at Hartford. Such an invitation was to me just at that time as disagreeable as it was unexpected. I had unfortunately acquired a dislike for deaf-mutes, having, when a boy, often seen them passing my grandfather's house in Hartford, gesturing and making wry faces at each other in a manner that seemed to me very odd. My antipathy to them was such that the idea of becoming associated with them was anything but agreeable, so I gave as direct a negative as I could politely give, begging the gentleman to extend his invitation to some one else. He very prudently suggested that I had better give the matter

some deliberate consideration before declining the situation. I told him I expected to be in Hartford the following week, and after thinking of the matter would inform him of my decision.

Little thought he or I at that time how intimately for twenty or thirty years we should be associated in instructing and training deaf-mutes; and little did I imagine that I should be for forty or fifty years—indeed, through the subsequent period of my life—a deeply entertained and interested teacher of these same wry-faced, oddly-gesturing people, (as they then appeared to me.) My readers must excuse me if I seem in this to be writing my own history rather than giving recollections of our worthy friend, Dr. Peet. When the editor asked me to give recollections of Dr. Peet, I could not refrain from thinking somewhat of myself in connection with him; and when I talk of affairs connected with him and the deaf-mutes, I am very apt to say, *quorum pars fui*. I have peculiar reason for remembering Dr. Peet in connection with my engaging in the profession of deaf-mute instruction, as it was he who first proposed it to me. It was, however, Dr. T. H. Gallaudet, who, after I had twice declined the situation, by a judicious representation to me of the true nature of the profession, persuaded me to try it. Now, after more than forty years' experience, I am happy to say that since the day I entered my class-room, in October, 1828, I have never regretted having encountered my old friend, Dr. Peet, at the college gate.

Dr. Peet left the American Asylum in the winter of 1830-'31, having been called to take the direction of the New York Institution. In 1832, in company with my friend and college classmate, F. A. P. Barnard, who was at that time associated with me in the American Asylum, I received a second invitation from Dr. Peet to teach deaf-mutes—this time to join him at New York; and this time I did not decline his proposal. The New York Institution was at that time taking a new start under the skilful management of Dr. Peet, assisted by an able corps of teachers, men of vigor, education, and talent, who, having effectively exerted them-

selves in the cause of deaf-mute instruction and in promoting the prosperity of the New York Institution, have since in no small degree become distinguished in their several professions.

There was at that time a tide in the affairs of the New York Institution which we all united to take at its flood and lead on to success, *and it was done*. Of our doings, social and professional, inside and outside of the institution, I should like to discourse, and give reminiscences of Dr. Peet and his collaborators, without let or hindrance, but my limits forbid. The institution lived by popular favor; so, by entertaining visitors at the institution, by our public exhibitions* in the city and before the legislature of the State, and by insisting upon the matter in extended and exhaustive annual reports, we kept the subject before the people, and the people responded. Those were the palmy days of the New York Institution. We glorified and were glorified, and Dr. Peet received glory, and was nothing averse to it. Who would have been, in such circumstances?

Some sharp criticisms have in former time been passed upon this season of glorification in the New York Institution, and, on some accounts, it must be admitted that it was obnoxious to such criticism; yet, for a public institution dependent on public favor and annual appropriations of money for its support, there are many reasons in justification of such a style of management. It prevents stagnation. To be obliged to make a show of doing something often proves advantageous, both to individual persons and to public institutions. One of the great dangers in this world, I think, is that of falling into conditions of morbid thought, feeling, and action, or into stagnant inaction.

It will hardly be expected that I shall go into an extended analysis of Dr. Peet's character. He was a man of strong will and deep emotion. His energy at times led him into

* I remember one entire summer vacation of between five and six weeks spent by Dr. Peet and myself, with a company of our proficient pupils, giving exhibitions in the interior and western towns and cities of the State, with manifest benefit to the institution.

sternness and severity. Indeed, in estimating his character, I am reminded of an observation that some one has made upon faults and virtues, viz: that in the case of persons of strongly-marked character "faults are often only virtues in excess." This was, to a considerable degree, true of Dr. Peet. He was strong and vigorous in the accomplishment of his purposes, which he honestly considered right and worthy of accomplishment; but his friends had sometimes occasion to remind him that others had purposes equally worthy of regard with his. One of the most prominent traits of Dr. Peet's character, well known and often remarked by his most intimate friends, was self-approbation. This, though considered a fault, was but a virtue in excess. Self-respect is absolutely indispensable to one who would be an efficient actor in any condition of life. Had Dr. Peet not possessed this to a considerable extent, he would not have been the efficient man he was. A man who has not enough vigor of character to have a fault must be a very feeble man.

I now recollect an occasion on which this strong tendency in Dr. Peet was very felicitously remarked upon by one of his old and intimate associates, in his presence, and in a public assembly. It was an occasion when much had been said complimentary to the Doctor, and his success in the management of the New York Institution had been strongly commended. His old friend remarked that were he called upon to assign one especial cause for Dr. Peet's successful career in life, he should say it was *his own good opinion of himself*. He recollected an incident of Dr. Peet's early life which would illustrate this. Mr. Peet was walking the street one day in Hartford, with two of his fellow-instructors, when, turning to them, and straightening himself up to his full, manly height, with an expression of strong self-assurance, he said: "Fellows, hold up your heads, and show the people that you have a good opinion of yourselves. If you don't think well of yourselves, nobody will think well of you." Acting upon this principle, he said, Dr. Peet had always maintained a good opinion of himself, and had suc-

ceeded in making others applaud his doings. This was by the company present considered good philosophy—a pertinent case of reasoning from cause to effect. The applause was long and loud, and the good old Doctor seemed to enjoy it as well as the rest of the company.

But I must close. It is with grateful remembrance that I think of the many kindnesses I received from my old friend, Dr. Peet, during the twenty years of my sojourn with him in the New York Institution, and with deep emotion that I recollect the many scenes of greatly varied interest in which I participated with him, his family, and others whose names and characters are deeply engraven in the memory of my heart. *Hæc olim meminisse juvabit.*

Well, the good old Doctor has gone, we believe, to the good world where characters are purified of even negative virtues, and where positive virtues shine forever in unalloyed brightness of ever-increasing perfection. As he did well, let us endeavor to imitate his example.

II.

BY B. M. FAY, M. A., SARATOGA, N. Y.

I BEGAN teaching in the New York Institution for the Deaf and Dumb, of which Dr. Peet a few years previously had been appointed principal, in the year 1833. He was then in the prime of life, had received a classical education at Yale College, and had been a teacher for several years in the American Asylum, associated with those other noble pioneers, Gallaudet, Turner, and Clerc.

A perfect master of the natural sign-language, with vigorous health, a strong will, and the experience already acquired at Hartford, Dr. Peet was eminently adapted to the post assigned him.

There had previously been in New York city a school for the deaf and dumb, which had attained so small success that its patrons and friends had become quite discouraged, and were half inclined, I think, to abandon the project of edu-

eating the deaf and dumb. Dr. Peet was obliged to take what remained of this school and build upon it—a task much more difficult than to have started *de novo*, because, by those already engaged in the management of this school, he was regarded as an intruder, and his efforts were misinterpreted and opposed. But with that adroitness and genuine Yankee sense so characteristic, he worked his way through these embarrassments, and raised this deficient and unpopular school into an institution which at once secured confidence and support.

Dr. Peet was an enthusiast in the cause he had undertaken, and to it devoted all his energies, never turning aside to other pursuits. His interest and labor were not limited to the instruction and management of the institution over which he presided, but he contributed to the common cause, and was, more than any other man in this department, the author of lesson books, and numerous articles and discussions representing the history, philosophy, and general literature of deaf-mute education.

An able article in the last number of the *Annals* comes to the conclusion that teaching the deaf and dumb “does not have an elevating influence on the teacher himself;” that he must “gain mental strength and vigor” by reading, studying, and writing on subjects outside of the school-room; but that in preparing text-books to be used in the instruction of the deaf and dumb “is a field, and a broad one, in which the mind of the teacher can busy itself.” Into this broad field Dr. Peet entered, labored in it for more than thirty years, and kept up “mental strength and vigor” to the last; but he never turned aside to the *neglect* of the duties of the school-room. Every week, if not every day, he knew what lessons were taught in the several classes, the progress made by each class, and nothing displeased him so much as failure in progress. In his visits to the school-rooms, he would sometimes take charge of the class, and teach for a short time; and by his emotion, energy, and will, with his clear, expressive signs, would arouse to the highest degree the attention and exertion of the pupils.

Occasionally a class was made up for him which he taught several weeks continuously—more than anything else, as it seemed, for the sake of demonstrating how great progress was possible in a given time by efficient teaching.

Dr. Peet excelled as a disciplinarian. In the earlier times of deaf-mute instruction, pupils were admitted to the institution at quite an advanced age; sometimes they were thirty years old. Some of these had never been taught to submit to any authority; in fact, were totally unconscious of any such thing as submission, and when required to yield to the orderly arrangements of a public institution, often manifested great stubbornness. Dr. Peet insisted on obedience and order in the school-room, study-room, and other departments. When some violent act of insubordination occurred, and the Doctor presented himself upon the scene, at first there appeared a terribly dark cloud rising on his brow, sure presage of the thunder and lightning soon to follow. Deaf-mutes sometimes know when it thunders; they feel the jar; often it is a little doubtful whether or not it be thunder which is felt; but there was never any doubt about Dr. Peet's thunder—the jar that was felt could not possibly be mistaken. In the most angry and defiant exhibitions of resistance, he demanded and received unconditional submission.

He gave high prominence to moral and religious training, being persuaded that these unfortunate children would attain the highest end of education when brought to a right apprehension and personal reception of the gospel of Christ; and he was permitted from time to time to indulge the hope that not a few of his pupils had by the grace of God reached this result in their individual experience. No one, I think, was ever more skilful and successful than Dr. Peet in imparting to young pupils, by natural signs, the elementary ideas of religion. In the Sabbath lecture services he was a master workman, entering into them with great earnestness, making deep and lasting impressions. The main points of these discourses were written out, and are still retained by many of his pupils. With redoubled in-

terest, doubtless, they review these lectures since their author's death, and behold his manly, robust form again standing on the platform before them ; behold the depth of earnestness exhibited in every feature and every gesture ; the clear, vivid representation of scripture truth ; the searching application and tender entreaty ; and again behold many a tear in that silent, solemn assembly.

III.

BY A. L. CHAPIN, D. D., LL. D., BELOIT, WIS.

I CHEERFULLY comply with the request of the editor to furnish for the *Annals* some personal recollections of the late Dr. H. P. Peet.

At his invitation I entered the New York Institution for the Deaf and Dumb as a teacher in the fall of 1838, and continued my connection with it for nearly five years. I count them among the most pleasant and profitable years of my life, and have ever cherished the acquaintance and friendship of Dr. Peet there formed. During the previous seven years of his administration, he had been laboring with intense devotion and energy to raise the institution from the low estate in which he found it, and before the world to "magnify his office"—to secure a proper and general appreciation of efforts to educate the deaf and dumb. The success of those labors was then quite apparent. He was sustained by a board of trustees thoroughly in sympathy with his aims, who gave him their full confidence. Through his repeated visits to the legislature with pupils able to illustrate in actual results the nature and value of his work, the State appropriations needed for the support and enlargement of the institution had been readily secured. He had gathered around him a corps of able men as instructors, who caught his spirit and gave him their hearty co-operation. Through his suggestion and direction, a series of reports had been issued in which the history and philosophy of the processes of deaf-mute instruction were so thoroughly

and clearly discussed that they must ever be regarded as a part of our standard literature in this department. The New York Institution had thus been brought forward into the very front rank of existing institutions of the kind the world over, and its principal was most evidently master of the situation. The exultation with which he spoke of what had been accomplished was certainly pardonable, as the natural effect of conscious achievement.

His own estimate of the work to which his life was devoted was inspiring to the young teacher who came to take a part in it, almost wholly ignorant of both its merits and its methods. Three of us came in together thus as raw recruits. In a few lessons, Dr. Peet unfolded to us clearly the elementary principles of the sign-language, and its appropriate place in a system of instruction for deaf-mutes, and we felt his own manifest enthusiasm and devotion as a stimulus to our best endeavors. In the use of the sign-language he was peculiarly graceful, clear, and forcible; I think I have never seen his superior for the distinct presentation of thought through that medium. He had carefully studied the capacity of that language, and gave it its legitimate place in the processes of instruction as an *essential means*—not itself an end. He would have it improved to the utmost, as a means of expanding a pupil's ideas, and introducing him to an accurate and familiar acquaintance with written language.

During the years of my association with him his time was chiefly occupied with plans for enlarging and increasing the facilities of the institution. The capacity of the building on Fiftieth street was nearly doubled by the erection of two wings. To these improvements he gave a personal superintendence, which, with his general oversight of matters, withdrew him for the most part from the direct instruction of the pupils. Near the close of the period, however, he found time to begin the preparation of those textbooks which have furnished such valuable aid to instructors all over the land.

In my view, the prominent characteristic of Dr. Peet was

his executive ability. He had not the highest order of intellect, nor did he possess that magnetic power which proceeds from a soul kindled and fired with strong emotion. But with a full quota of good common sense and general intelligence, his mind was eminently fertile in expedients, sound in judgment, and clear and steady in its convictions. These qualities were sustained by a strong will-power, not easily staggered by difficulties. He read men with a nice and generally correct discernment of their distinctive qualities, and had great tact in approaching others and gaining their ready co-operation, or, at least, disarming their opposition to his purposes. Thus he rarely failed to carry any measure which he undertook. He threw himself with all his soul into the enterprise committed to his charge, identifying his own interests with those of the institution, and making its success the object of his highest personal ambition. If, under this impulse, his bearing towards his colleagues seemed at times to say "*l'état c'est moi*," it is not, I am sure, remembered with offence in view of the great and good results achieved. Only such a personal identification with a noble object could have carried the institution up to the eminence it has attained in a single lifetime. He was the soul of the movement, and its honors are rightfully his as God's chosen instrument. We have in his case a striking example of the power of simple, unwavering devotion to one grand and worthy end—to make the most of the man, and to bring forth the richest and best fruits of a useful life.

As I knew him, there was evidently blended with other qualities in Dr. Peet's character the prevalent sway of positive Christian principle. This shone out not so much in the glow of fervid religious affection as in the steady light of a life governed by the fear of God and the faith of Jesus Christ his Son. I have very pleasant recollections of the daily evening service, which gathered the speaking members of the household in his family parlor, and of the Sunday evening religious conferences held in the institution as a substitute for the church meetings, which the distance pre-

cluded us from attending. In these services Dr. Peet was wont to take his part in devotional exercises and in the free interchange of thought on questions of Christian truth and duty, evincing the soundness and sincerity of his faith, and his warm interest in all that pertained to Christ's kingdom in the world. As I have occasionally met him in late years, it has seemed to me that his Christian graces were evidently ripening and mellowing the sterner qualities of the executive element in him to a warm and genial sympathy and love for all men. I saw him last at the recent meeting of the Foreign Missionary Board in New Haven. As the signs of age and increasing infirmities suggested the thought that I might never see his face again on earth, his whole tone and manner, as he expressed his interest in the object of the meeting, assured me that death when it should come would be for him but a blessed translation to "the general assembly and church of the first-born which are written in heaven," to which he would be welcomed with the gracious benediction, "Well done, good and faithful servant. Enter thou into the joy of thy Lord."

IV.

BY REV. THOMAS GALLAUDET, D. D., NEW YORK.

DR. PEET began his honorable career as an instructor of deaf-mutes in the Asylum at Hartford, Connecticut, in the fall of 1822, a few months after I was born. He, therefore, figures largely in my earliest recollections of what happened in the Asylum and its beautiful grounds. I associate him with his gentle wife, and the energetic matron, Miss Martha Dudley. They were all very kind to me in my boyish sports. I looked with admiration upon Dr. Peet's fine form and handsome face, and when he invited me to ride with him after his favorite spirited white mare, I was very happy. Frequent riding and occasional rambles over the neighboring woody hills with his gun developed in Dr. Peet splendid physical powers, and laid the

foundation of the strength which enabled him to endure the fatigues of the recitation-room and the hours of study which he devoted to the preparation of lessons and books. From the accounts which his pupils have given me from time to time, as I have met them in my journeys, I judge that Dr. Peet from the very outset was a rigid disciplinarian and laborious teacher. Under his skilful guidance, his pupils felt that they were making steady advances in acquiring a knowledge of the English language.

Dr. Peet became the principal of the New York Institution in 1831, and from that time I saw but little of him till I became a member of his corps of teachers in September, 1843. I held that position for fifteen years, and during that time became so thoroughly acquainted with his characteristics that I can bear testimony to his remarkable executive ability, his clear and effective sign-making, his commanding influence in the various departments of education, and his uniform success in accomplishing his plans for the prosperity of the institution.

In the spring of 1853, Dr. Peet attended a meeting in the smaller chapel of the New York University, to assist in founding St. Ann's Church for Deaf-Mutes, being there associated with the Rt. Rev. Bishop Wainwright, the Rev. Drs. Haight, Bedell, Francis Vinton, and Weston, Generals Webb and Wetmore, Messrs. Cyrus Curtiss, Augustin Averill, Jacob Van Nostrand, and others. In a forcible speech he set forth the advantages which would accrue to the adult deaf-mutes of New York and its vicinity from having Sunday services and pastoral care.

In the spring of 1858 a public meeting was held in the lecture-room of the Historical Society building, where St. Ann's church was then holding its Sunday services. The object of the meeting was to perfect a plan by which I could resign my connection with the institution, and devote myself more fully to pastoral work among the deaf-mute residents of New York and its vicinity. Dr. Peet attended this meeting, and did good service in bringing about the desired results. Such provision was made for my support

as enabled me to leave the institution, October 1, 1858, and make more effective my work as rector of St. Ann's church for deaf-mutes and their friends.

After this I had frequent conversations and consultations with Dr. Peet at the institution. I often met him at the meetings of the board of directors, and on several occasions had the pleasure of seeing him at conventions of the teachers of deaf-mutes. Through all the vicissitudes of his declining years, I could see that our venerable friend was evidently ripening in his Christian character. God was preparing His servant for the gracious close of his earthly pilgrimage. Light from the Saviour beamed upon the valley so dark to poor, weak human nature, and we can surely believe that the angels bore the departing spirit to the rest of Paradise.

V.

BY WARRING WILKINSON, M. A., OAKLAND, CAL.

THE telegraph wire from New York to San Francisco never bore a sadder message than these words:

"NEW YORK, Jan. 1, 1873.

"My father died peacefully at one forty-five this morning.

"ISAAC LEWIS PEET."

The news was so unexpected, its import so stunning, that for a time it seemed as though the messenger had outstripped the message, and taken lodgment in my own heart; and even now, at the distance of a month, and after many readings of that mournful telegram, a dear and venerated face looks in upon my inner consciousness with a vividness that gives the lie to the lightning, and to me, at least, an abiding presence that is beyond the reach of death and the grave.

In the brief space which the *Annals* and my own multifarious duties allow me to fill, I do not propose to write a biography. Every biography is a history, and to write history requires an impartial historian. I cannot analyze Dr. Peet or his work. I am unfitted by the tender love I bore

him to act the judge on what he was or did. Doubtless he had his *faults*, as Bolingbroke said of the dead Marlborough, but really he was so great a man that I have forgotten what they were. I use the word "great" advisedly, but not in its historical acceptation. I call him great, who, inspired with a *worthy* idea, concentrates all the energies of life to its accomplishment, and in the heat of whose divine purpose the meannesses and littlenesses of humanity are burned to ashes.

There are many hearthstone heroisms, like Charles Lamb's devotion to his sister, that rank half the subjects of history. Indeed, few of the world's heroes will stand the test of motive. The avarice and intrigues of Marlborough dim the glory of Blenheim; the divorce of Josephine hurled Napoleon from his pedestal long before the fall of the Column Vendôme. Noisy men have lived and died, and their reverberations have drowned the fame of those quiet workers in the temple where no sound of hammer or axe is heard; but the judgment of this world is not the court of ultimate decision. "Boy," said the Athenian flute-player, whose pupil was trying to produce loud rather than sweet sounds, "that is not always good which is great, but that is always great which is good."

Judged by my standard, Dr. Peet was a great man. Graduating from Yale College at the mature age of twenty-eight years, Dr. Peet stood upon the threshold of active life without the dangerous possession of *genius*, but with the indomitable pluck that had secured his education, and with the talent which is the key to circumstance. Had he, at that time, entered the law, he would never have become a rhetorical pleader, like Choate, but rather an expounder of fundamental principles in law, like Webster. He had not the fervid imagination and ready command of language which in the pulpit characterize the pastor of Plymouth church; but had he adopted the clerical profession, he would have become a great theologian, a sturdy defender of the faith—an Edwards rather than a Beecher.

But God had a special work for this man to do, and

brought him face to face with it. We see daily examples of men toiling in that for which they have neither taste nor talent. Many go through life conscious that something is out of joint; feeling the harness gall; complaining of the heaviness of their burden, when it is simply its misplacement—I have got your pack, and you have got mine. Others, sadder yet, find out the mistake too late, when pride or bread and butter prevents a man from going to his proper work. Again, there are tentative men who never can decide just what they are fitted to do. I know a college graduate who in fifteen years has gone from divinity to law and from law back to divinity four times, unable to tell where he belongs, without apparently considering whether after all God did not intend a shoemaker.

But there was no blundering or vacillation in Dr. Peet. If ever there was a special adaptation to each other of worker and work, it was in his case. He brought to the profession a powerful and commanding physique, developed and toughened in the hard labor of a New England farm. He had obtained the culture of the college without contracting its vices. He was fitted to control others because he could control himself. Firm in government, fertile in resources, sympathetic in feeling, of good business capacity, with a remarkable aptness for pantomimic illustration, and thoroughly imbued with the spirit of the Master, he combined more essential qualities for success in deaf-mute instruction and management than any man I ever saw.

I became associated with Dr. Peet in the fall of 1857. He was then sixty-three years old, but bearing his years with exceeding grace and dignity. His implacable enemy, rheumatism, from which in after years he suffered so much, had at that time only been able to stiffen somewhat the suppleness of his powerful organization. His hair had bleached under the summer sun of peace and content—there was never any suggestion of *frost* in his gray hairs; but he had not yet yielded to the innovation of beard and mustache. His manner was remarkably genial; his presence never cast a shadow; his smile was sunshine itself. Time seemed

to have ripened and mellowed his nature. He never outlived his hearty sympathy with the young and with youthful enjoyments. He had neither the gruffness of Johnson nor the social plumpers and padding of Chesterfield. He was a genuine *man*, which is much, in this age of shams and pretences. He was honest without prating about it. He was tenacious and persistent in his opinions, and rarely declined a literary controversy in their defence. He was proud of his literary work, and had a right to be, for all his published writings are good. None of his subordinates can forget how in a pleasant way he used to commend to us the "good reading and spelling" to be found in his annual reports; and it is only justice to our departed friend to say that if we lack a knowledge of what has been done in our profession it is because we neglected to follow his advice, for the whole history of deaf-mute instruction is embodied in those papers.

Dr. Peet was not what is called an easy writer, but then, as Sheridan profanely says, "Easy writing is often d—— hard reading." He had the patience, though not the leisure, of Livy and Froissart, who labored each on his history forty years; or of Prescott, who rewrote his "Conquest of Mexico" sixteen times. He used to regard with feelings akin to wonder the man, who, like Byron, could write the "Bride of Abydos" in a single night, or Christopher North, who would dash off a twenty-page article at a sitting, and when speaking of such would always quote his favorite distinction between genius and talent—"That which is the work of talent is the play of genius."

Dr. Peet's nature was eminently and essentially healthy, *mens sana in corpore sano*, in spite of the rheumatic attacks referred to before, and even at the advanced age of nearly fourscore years his mental faculties were fresh and vigorous, his memory was unimpaired, and his interest in current events as keen as in his prime. He never sank into the driveling and querulousness of dotage; never even passed into the "mild decay" which Lamb speaks of; but to the last exhibited the unselfish regard for the comfort of others

which always characterized his hospitality. He had none of the dread of death which made Dr. Johnson's last days so miserable, nor had he that "sharp malady of life" so pathetically described in *Eothen*; that sickly, morbid longing to be at rest which is considered to be the correct thing for an aged Christian to feel. While he kept himself ready for the Master's call, he would have been glad to put on the harness anew and enlist for another term of service.

When I became associated with Dr. Peet he had enjoyed a long period of unusual happiness and prosperity. The institution which he found so small and unpromising had come to be, under his twenty-six years' consummate management, without a rival in size, in appointments, and in results. The obscure farmer boy of Litchfield had won by sheer force of character and sturdy persistence of purpose the foremost place in his profession. A family of worthy sons inheriting their father's virtues and talents had grown up to be the props of his advancing age, and prattling grandchildren gathered at his knee gave promise of perpetuating the race he had founded. A happy second marriage had, with the lapse of time, soothed the bitterness of an early affliction, while fortunate investments had secured a competency whenever work should come to be a burden.

Then began that series of sorrows, stroke after stroke, which in consecutiveness and severity have never in my experience been equalled. Reversing the order of Job's trials, God first touched him in his person, and day by day we watched the darkness falling upon his eyes, marking with tender but silent interest the progress of his malady, as one by one he laid aside his accustomed duties, his morning paper, his literary employments, and soon we knew that for him the world's horizon had narrowed to the radius of his arms, and that even the faces of wife and children and friends had come to be simple memories. But though the affliction was sore and the burden very heavy, not a murmur or complaint was heard. Through that trying period of blindness he exhibited the same Christian resignation and trust that characterized his whole career.

A successful surgical operation restored him once more to the light of day and the recognition of friends. Who that witnessed the scene can forget the sunny afternoon when he returned to his family! How they gathered around his chair, each an unbelieving Thomas, with a test—a fine printed book, a newspaper, a bit of handwriting—and as one by one he read them all, how we all mingled our tears of joy with his at the great miracle that had been wrought!

But his eyes were opened only to see one after another of his dearest possessions snatched from his side by death. Within a period of four years, beginning in 1862, he laid to rest two sons, his wife, sister, brother-in-law, two grandchildren, two daughters-in-law, and his loved nephew, till it seemed as if his family was doomed to utter extinction. Such an aggregation of afflictions can hardly be paralleled outside of Greek tragedy, yet every stroke seemed to drive him closer and closer to God. It is said that Goethe never had a grief without making a poem of it. Dr. Peet, in a wiser spirit, used every sorrow as a means of spiritual betterment. And this, with his industry, makes the lesson of his life—faith and work—so that he seems to have realized the poet's advice to a young friend: "Be good," says Charles Kingsley—

"And let who will be clever :
Do noble things, not dream them, all day long ;
And so make life, death, and that vast forever
One grand sweet song."

VI.

BY BENJAMIN TALBOT, M. A., COUNCIL BLUFFS, IOWA.

IN the death of Dr. Peet it may well be said that the Nestor of the profession has departed. Though withdrawn for a few years from active service, his lifelong labors, his untiring energy, and his deep interest in the cause of deaf-mute education; the great numbers of pupils trained under his direction and control; the text-books prepared by him for their use, and actually used throughout the country; and

his valuable contributions to the literature of the profession, warrant us in saying that the very foremost man among us has fallen.

The recollection of his personal appearance reminds one of the description given of Dr. Joseph Bellamy, long the pastor of the church in Bethlem, the birthplace of our deceased friend. Of commanding and majestic presence, naturally inclined to act the magisterial part more harshly and severely than was agreeable, it seems as if the description of the New England minister were almost prophetic of the appearance of the man born in his parish a few years after his decease. Nor was the similarity between the two limited to outward looks and bearing. Their minds also seem to have been of the same stamp. Each was a man of great intellectual vigor, with strong and positive opinions, with a wide range of thought and a powerful grasp of truth, so that he left an indelible stamp on the minds of all with whom he had to do, especially on the minds of his pupils and his associates in daily labor.

The hill country in Litchfield county, Conn., has produced or fostered many men of mark—men stalwart in body and strong in mind, who have reached eminence in the various forms of professional and political life, but none perhaps more useful or more eminent in his line than Dr. Peet.

Other pens than mine must describe his wisdom and success in the administration of the institution at the head of which he stood so long; but none can truthfully say or honestly feel that its directors made any mistake when they called him to the post.

The reputation which he gained in this position were enough for one man; but our venerable friend was permitted to make his fame world-wide by his extensive labors with his pen. His text-books for the deaf and dumb, though not perfect, are yet the best helps our institutions have for the elementary instruction in language; and though some have found fault with them, and a few perhaps reject them, yet who has made any better? And in addition to these

valuable contributions to the work of deaf-mute education, all of his compeers and associates in the profession, with all that are to come after us, are under lasting obligations to him for the many thorough and exhaustive essays in his annual reports and in the pages of the *Annals*, as well as in his convention papers and discussions. His writings on the deaf and dumb are profuse and varied, treating almost every topic and touching almost every question connected with this class. In the preparation of these various papers, Dr. Peet did a vast amount of work; displaying a patience in investigation, a thoroughness of comprehension, a completeness of thought, and a painstaking and scrupulous carefulness of statement, that are most admirable. Even the drudgery and vexation of revising and harmonizing blundering census reports were taken up cheerfully, that his statistical papers might be made more perfect.

Few or none have equalled Dr. Peet in the faithful, conscientious discharge of his duties as a contributor to the literature of our profession; and to no one are we as a fraternity under greater obligations in this respect.

VII.

BY EDWARD M. GALLAUDET, PH. D., LL. D., WASHINGTON.

THE knowledge of the fact that a friend has passed the limit of three-score years cannot fail to touch a tender chord in the heart.

Health and vigor may yet remain, but the thought will not be dismissed that the elastic tread must fail ere long, the beaming eye grow dim, and the erect form bend under the burden of infirmities.

Age in man impresses one with a certain sense of the inevitability of death, seldom attaching itself to the young, which is forcibly expressed in the well-worn line: "The youthful may, the aged must die." And so one is apt to associate with age an idea of nearness to Heaven, which leads us to regard the old in some sense already sainted.

As I call upon memory to bring forward her impres-

sions of my departed friend, Dr. Peet, I find that I only knew him as having passed that mysterious limit which marks the beginning of old age.

I well remember the feelings of admiration and respect with which I regarded him at the Virginia convention of instructors of deaf-mutes, held in 1856.

He was sixty-one, in full health, of commanding presence and striking beauty. His hair was nearly white, his face smoothly shaven and ruddy, his movements graceful, his voice strong and impressive. He was the acknowledged leader of the convention; the Nestor of the profession there represented. My first acquaintance with Dr. Peet was at this convention, and I have a most grateful recollection of his courtesy and kindness to me, encouraging and inspiring as it was to one just entering the profession to which he had so usefully and successfully devoted his life.

Shall I be pardoned if I so far violate that somewhat questionable rule, "*de mortuis nil nisi bonum*," as to record an impression of which I was at this same time conscious, that Dr. Peet had not taken sufficient pains in the self-culture of a long and useful life to restrain the tendency to vanity and the desire for notice that is apt to seize hold of men who rise to positions of prominence?

I distinctly remember asking myself the question whether this development of self-consciousness was probably a necessary trait in men who had achieved greatness. And in my youthful inexperience of what was possible to man with God's help, with a disposition also to spare the hero I was worshipping all adverse criticism, I answered the question in the affirmative.

Passing over many private meetings with Dr. Peet, occurring during a period of twelve years, in which he gave me repeated proofs of his friendship, I recall him as he graced by his presence the conference of principals held in Washington in 1868.

Accepting in an appropriate and happy speech the permanent presidency of that conference at the hands of the temporary chairman, his friend, Hon. Amos Kendall, Dr.

Peet presided over the deliberations of that important meeting with a dignity, a courtesy, a fairness, and an alertness rarely combined in a man of threescore and thirteen years. And although time had wrought marked physical changes since the days of the Virginia convention, the mind retained its early vigor, and Dr. Peet stood at Washington, as at Staunton, chief among the leaders in his profession.

The most agreeable impression which returns to my mind as connected with my venerable friend in his visit to Washington is of a certain gentleness and kindliness of manner seldom exhibited save by those who have learned that last and most difficult of life's lessons—how to grow old gracefully. And I think it was the aroma of this blossom of life's sunset hour, best likened perhaps to the rare flower of the century plant, that first evoked from my heart a feeling of love towards him whom I had for many years gladly considered as my friend.

On still a third occasion had I the pleasure of meeting Dr. Peet in convention; and at Indianapolis, in the summer of 1870, my impressions of the beauty and attractiveness of his ripe old age were deepened.

Laboring under greater physical infirmities than before, there was still the clearness of intellect on which man grounds his best self-taught hopes of immortality; there were the "apples of gold in pictures of silver," that seem so precious when presented by the old to the young; but above all, and better than all, there were plain indications of the indwelling of a spirit that could accept cheerfully the putting off of the harness, and patiently take service among those "who only stand and wait," comforting itself with the blessed words it might rightly use as its own: "I have fought a good fight; I have finished my course; I have kept the faith; henceforth there is laid up for me a crown of righteousness, which the Lord, the righteous Judge, shall give me at that day."

The duty of recounting the important and useful labors of our departed friend I leave to others better fitted than I to perform the grateful task; the more delicate office of set-

ting before the world a fitting analysis of his character and a suitable commentary on his long career I look to see fulfilled by abler hands than mine.

But I trust I may be allowed to stand among the many who will rise up to do honor to our friend, though my offering be an humble one; for it is but simple justice to the memory of the deceased that I record the impression he has left upon my mind of a man who, with much to contend against from within and from without, reached at length the highest development possible to human nature; that childlikeness which is the glory of every stage of life, and the possession of which gives rank among the first in the kingdom of heaven.

THE LAST BIRTHDAY.

BY MRS. MARY TOLES PEET, NEW YORK.

[THE following lines, which we take from the *Deaf-Mutes' Journal*, were read at a little gathering on the occasion of Dr. Peet's last birthday, a month and a half before his death. The author, as most of our readers are aware, is the accomplished wife of Dr. Isaac Lewis Peet, and was formerly a pupil of the New York Institution.—ED. ANNALS.]

Waiting eyes and wandering feet
Here beneath this roof-tree meet,
Full of joy this day to greet.

Youthful hearts with hope aflame;
Manhood bringing love and fame;
Childhood lisping soft his name—

Name of many names most fair,
Mingling with our daily prayer,
Making music unaware.

Other names may tell of deeds
Shaped by sword to nation's needs,
Noble to the fullest needs.

Other names ring softly round
Brows the poet's wreath hath crowned.
Filling silence with sweet sound.

But his name is nobler far
Than if linked with deeds of war,
Musical as poets' are.

And as stately tree and high
Lifts its branches to the sky,
Giving shade to passers by,

So his blessing arms extend
Over child, and guest, and friend,
Sheltering, shielding, to the end.

Father! keep him many a year,
Be his strength and fortress here,
Let him know not doubt nor fear.

And when death's dark shadows fall
Over him, as over all,
Saviour! through the darkness call.

Lead him through the realms of night
Up into Thy morning light,
Where not age nor death can blight.

NOTE.—A leading feature of this memorial number was to have been an admirable "Summary of Dr. Peet's Recorded Researches and Opinions," the paper by Mr. Syle, which is mentioned on page 70. But we find that lack of space will compel us to omit this, as well as the editor's personal recollections of Dr. Peet, and several shorter sketches that have been contributed. The "Summary" will be published in the next number of the *Annals*.

The following resolutions have been sent us for publication. For economy of space we omit the expressions of sympathy from some of the resolutions, and the more formal parts from all, as well as the names of officers.—ED. ANNALS.

RESOLUTIONS.

By the Board of Directors of the New York Institution.

Resolved, That in the death of Harvey P. Peet, LL. D., Ph. D., we have lost one who for many years devoted the best energies of mind and heart to the elevation and benefit

of the deaf and dumb, who was a faithful and constant member of this board of directors, and to whom the New York Institution owes in a large measure its present position and prosperity.

Resolved, That we tender our hearty sympathy to the family of our deceased friend, and to that large circle of deaf-mutes, teachers and pupils, who had learned to call him father.

*By the Teachers and Officers of the New York Institution.
(Offered by the Rev. J. H. Pettengill.)*

Resolved, That we have long recognized Dr. Peet as one of the chief leaders in the instruction of the deaf and dumb, and one of the most distinguished exponents and advocates of this cause. The intelligent zeal with which he devoted himself to this work; his skilful use of the language of signs; his thorough discipline of mind; his sound judgment; his indomitable power of will; his energy of character; his rare executive ability; his power of impressing and managing others in the behalf of this cause, and his life-long connection with it, covering a period of more than half a century, have all combined to give him great success and to identify his name with the cause of deaf-mute instruction throughout the world; and the very valuable services which he has rendered to this institution and to the cause at large by his writings and varied labors, call for the most grateful recognition from us and from all who are engaged in the work to which he devoted his life.

Resolved, That we tender to the family and friends of the deceased in this, their heavy bereavement, our sincere and respectful sympathy, and commend to them the consolations afforded by that Christian faith which he early embraced, and strictly maintained and inculcated throughout the whole period of his active life, and which was the solace of his declining years.

By the Fanwood Literary Association. (Offered by James Simpson.)*

Resolved, That in the death of Dr. Peet we do deeply feel the loss of a good friend, a valuable teacher, and a great benefactor.

Resolved, That we tender to the sorely afflicted wife, the greatly endeared and only surviving son, and the other relatives of the deceased, our sincere and heartfelt sympathy in this, their bereavement; that we desire to express to them our appreciation of his many virtues, and the great and good work he has accomplished in behalf of deaf-mutes during his long and well-spent life.

Resolved, That we will cherish the memory of this, our deceased friend, and will each of us try to imitate him by leading a noble, useful, and Christian life.

By the Grand Lodge of the E. S. Society.† (Offered by Henry Winter Syle.)

Resolved, That the Grand Lodge deplores in the death of Dr. Peet the loss of a whole-souled and eminently valuable friend of the deaf and dumb. He devoted rare abilities, with singleness and steadiness of purpose through a long life, to their education and elevation. As a teacher, he was successful and beloved. As the head of what under his wise fostering grew to be the largest institution in the world, he displayed high executive abilities and rigid integrity. The writings for which he found time amid his varied duties extended his usefulness far beyond the walls of his own school, and will continue it far beyond the limit of his life. He has guided the first steps in knowledge of many who never saw his face by the text-books he prepared with a keen insight into the peculiarities of the developing

* Composed of teachers and advanced pupils of the New York Institution.

† Composed of deaf gentlemen, mostly graduates of the high class of the New York Institution.

mind, profound study of the difficulties it encounters, and judicious skill in overcoming them. The teacher, the divine, the philanthropist, the philosopher, and the statesman, are alike indebted to him for the laborious investigation and lucid exposition of many matters of the highest importance to the moral and physical welfare, the social and legal status, of the deaf and dumb. From all who knew him, his lofty character commanded sincere respect. His genuine kindness won confidence and love. His watchful interest followed his pupils out into the world. His generous sympathies were open to all. In his labors he was actuated by warm and pure Christian principle; adding to his earnest and eloquent exhortations the force of a consistent example in all the relations of life. Honored and beloved, he leaves none who do not mourn and revere his memory.

Resolved, That as a society of deaf-mutes, banded together for our mutual good, we have especial reason to cherish the memory and offer homage to the name of Dr. Peet.

But for his labors our society might never have arisen; its field might have been small, or the laborers few. Our great objects are the cultivation of the virtues—manly independence, enlarged minds, faithful, generous hearts—which he strenuously inculcated, and which shone conspicuous in his own character.

By the Board of Directors of the Pennsylvania Institution. (Offered by James J. Barclay, Esq.)

Resolved, That in the death of this eminent man society at large has lost a distinguished citizen, and the deaf-mute a long-tried, enlightened, and faithful friend, whose life was successfully devoted to the improvement of the system of instruction, and to the elevation of the character of the deaf and dumb.

By the Principal and Teachers of the Michigan Institution.

Resolved, That in the death of one who has been for many years the acknowledged head of our profession, and

whose long experience and clear insight into the mental wants of the mute rendered his ever-ready counsel of the greatest weight, the cause of deaf-mute instruction has sustained an irreparable loss.

Resolved, That in his death the deaf and dumb have lost an influential friend, whose advice and counsel, by reason of his great knowledge of their wants and his well-known interest in their welfare, carried great influence with it, and led many to take the right direction in life.

Resolved, That while we are thus deprived of his earthly presence, we will cherish his memory, and ever strive to be animated by the same enthusiasm and energy that enabled him to accomplish such great results.



By the Instructors of the Columbia Institution. (Offered by Edward A. Fay.)

Resolved, That we desire to record our high appreciation of the great services that Dr. Peet, during his long and useful life, rendered to the cause of deaf-mute education. His labors in the actual work of teaching at Hartford and New York, his text-books for the course of instruction, his contributions to the literature of the profession, and his untiring and successful efforts in other ways to promote the interests of the class to whose welfare he devoted his life, entitle him to an eminent place among the greatest as well as the first American instructors of the deaf and dumb. While we lament that we shall see his noble face and listen to his wise counsels no more, we rejoice that he was permitted to accomplish so much, and to witness so much of the fruit of his labors.



By the Students of the National Deaf-Mute College. (Offered by Edward Stretch.)

Whereas, Dr. Peet devoted a long and useful life to the education of that class of society to which we belong, and it is in a large measure to his labors in the cause of deaf-

mute education that we owe the many privileges which we now enjoy; therefore, be it

Resolved, That in his death we have lost a benefactor and friend, and society a noble member.

Resolved, That we shall ever cherish and honor his memory for that which he has done for us and for the world.

By the Officers and Pupils of the Ontario Institution.

Resolved, That in the death of Dr. Peet we recognize the loss to instructors and pupils of a faithful friend and adviser, and a ripe experience of more than half a century in the profession to which he devoted the energies of his life; to the Church, a follower who adorned the doctrines of Christ in his walk and conversation; and to society, of one who possessed all the gifts and graces of a pure and noble mind.

DR. PEET'S PORTRAIT.

BY THE EDITOR.

SEVERAL portraits of Dr. Peet have been engraved and printed. The steel vignette accompanying Mr. Burnet's Biographical Sketch, published in 1857, which was copied from the fine portrait painted by Huntington in 1850, was very good. We think we recollect a wood-cut in Leslie's *Illustrated Weekly*, some time later. The *Phrenological Journal* of April, 1869, contained a fair wood-cut from a recent photograph. This was reproduced in the *Silent World* for January 15, 1873. Doubtless the best likeness of Dr. Peet, as well as the most artistic engraving, is the one presented in this number of the *Annals*. It was copied from a photograph of our departed friend, taken in the ripeness of his years, and has already appeared in the *Illustrated Christian Weekly* for February 15, 1873, where it was accompanied by an appreciative and well-written sketch, by Miss Annie Wager, a graduate of the New York Institution.

MISCELLANEOUS.

BY THE EDITOR.

Recent Articles Relating to the Deaf and Dumb.—The *Medical and Surgical Reporter* for December, 1872, has an article by Dr. Laurence Turnbull on Professor Bell's method of "Visible Speech," which Dr. Turnbull regards as of very great value and importance in the education of the deaf and dumb. The article contains little that has not already appeared in the *Annals*. The following suggestions with regard to a preliminary examination of pupils to whom it is proposed to teach articulation may be of value :

"Before commencing to teach a class of deaf-mutes in articulation, each one should be carefully examined by the physician of the institution, both the external and middle portions of the ear, by means of the aural speculum, with bright light. Also, auscultation of the middle and internal ear by the double stethoscope. Rhinoscopy should also be employed; which is the inspection of the posterior region of the nares by reflected light. A mouth-mirror is to be placed beneath and behind the soft palate and uvula, with its reflectory surface looking upward and forward, so as to inspect the posterior opening of the nasal passage, Eustachian tube, etc. This same apparatus can be employed to examine the throat by means of an image of the parts reflected upon a small mirror placed within the pharynx, with its reflecting surface turned downward, the ray of light being received on the mirror from the sun or artificial light. To examine the anterior portion of the nose, a bright reflected light is required, and Kramer's bivalve ear speculum answers the purpose very well. A careful certificate should then be made out of the condition of the parts, and each case should be numbered in the order in which it is found; also, the mental condition or fitness to undergo the brain labor necessary to acquire the English language in all its fullness. In this way it would save the teacher the unpleasant duty of attempting to teach the pupil for a time, and then informing him that he was defective, and unable to go on with this form of study. A painful instance of this kind we recently noticed on a visit to one of our institutions."

We also quote letters from Miss Sweet and Mr. Clarke, who have taught articulation by Professor Bell's method for

several months in the American Asylum. Miss Sweet writes :

“ I have fourteen pupils, who leave their school-rooms daily and come to me at different hours to be taught articulation. These pupils are in various stages of progress. Six are semi-mutes, who talk so as to be readily understood by any one, and can themselves understand me well by reading from my lips. The others are congenital mutes, and those who lost their hearing before language was learned. You ask the number of sounds acquired. The six first mentioned could speak when they entered the class. In several cases nasality and harshness of voice have been removed, and many imperfections in articulation have been corrected. Great pains are taken to improve their knowledge of lip-reading. As to the congenital mutes, a part of them can give all the English sounds, both separately and in many different combinations. Those who have more recently begun the study, and have not yet reached this point, will soon do so. Two of the original class were dropped ; not that it was an impossibility to teach them, but they lacked application, and it was thought that the time could be better spent on others. We have another class, taught by another teacher.”

Mr. Clarke writes :

“ My experience is too limited to warrant me in making any definite statement in regard to ‘ Visible Speech,’ except that I have found it thus far adequate in the attempt to teach articulation to bright pupils.

“ With regard to obtaining ‘ natural tones ’ from semi-mutes, I can only say that much depends on the time at which the pupil became deaf, and the degree of hearing that may still remain. A little hearing may make a great difference in the tone.

“ I do not think any of my pupils can speak in what can justly be called a natural tone. The majority of both semi and congenital mutes can vary the pitch of the voice so as to give chest and head tones, and some can glide from one to the other very well.

“ Some of the pupils have done very well, but none have surprised me by doing more than the labor spent on them entitled me to expect.

“ I cannot conceive of any considerable success being obtained in teaching articulation without the use of ‘ Visible Speech.’ ”

Dr. Turnbull’s paper has been reprinted in pamphlet form.

The *Canadian Monthly* for December, 1872, contains an article by John Lesperance, entitled "The Dumb Speak." The author attended an exhibition of the Montreal Catholic Institution last year, and startled at hearing "some twenty of these unfortunate creatures speak out loudly, distinctly, without apparent effort, and quite intelligibly in both English and French," inquired into the matter, corresponded with teachers of the deaf and dumb, read authorities, and finally produced an article as accurate and valuable as such articles usually are. He sketches in an interesting manner the theories and methods of the Abbé de l'Épée and Samuel Heinicke respectively, and reviews the present state of deaf-mute instruction, giving a preference to the combined method used in the Montreal Institution. The inaccuracy of his information about the schools of America is evident from his asserting that "the method of articulation has not yet been tried in New York nor anywhere on this continent, except in the Montreal Institution, and partially at Northampton, Mass." He is equally incorrect in saying that pupils are not admitted into the New York Institution under twelve or fourteen years of age.

The following statement of one of Heinicke's devices for teaching articulation will be new to many of our readers:

"To soften the articulation of deaf-mutes and render the impression of the vowels lasting in their memory, he imagined a scale of gustatory senses—*Scala des Geschmacksinnes*—by which he intended to endow the sense of taste—which in man is very keen—with the acoustic qualities of the voice. He argued that by placing on the tongue of deaf-mutes a bitter, a sweet, or a sour substance before and after the articulation of one or the other vowel, they would attach the particular movement of the vocal organ to the simultaneous sensation which they experience. The coincidence and the fusion of the two impressions must necessarily give fixity to articulation, when the exercise is repeated a certain number of times. Thus, for the vowel *a*, Heinicke employed pure water; for the vowel *e*, worm-wood; for the vowel *i*, vinegar; for the vowel *o*, sweetened water; for the vowel *u*, olive oil."

The Combined Method.—The Rev. J. A. Bélanger, principal of the Montreal Catholic Institution, writes us that

the "combined method" of instructing the deaf and dumb, advocated in Mr. Kruse's treatise,* is substantially the same that has been employed by himself for two years with great success. Mr. Bélanger had not previously seen this treatise, but had adopted the method after visiting a number of European institutions, especially those of England, France, Belgium, and Germany. With respect to the results obtained, Mr. Bélanger says:

"Of the pupils I have had since adopting this method, if I except those who are somewhat idiotic, all have learned to speak pretty well, and some well enough to deliver addresses in some of our largest halls in Montreal, and before large audiences. And I am happy to say that articulation has been taught to our deaf and dumb without any damage to the other branches of instruction, for we use the signs as before."

We confess that this statement, taken in connection with Mr. Bélanger's previous declaration that there are *no* semimutes among his seventy-five pupils, would seem to us extravagant and improbable, if it did not come from so high an authority. Mr. Bélanger has sent us a printed copy of his method. It contains long lists of the elementary sounds and their various combinations, printed in large type on separate sheets of paper, which seem to be suitable for hanging on the wall. No explanations accompany it, and, as Mr. Bélanger remarks, it is impossible to judge of its value without seeing it in practice. From the cordial way in which Mr. Bélanger invites the editor to visit his institution and witness the results of his method, we feel sure any member of the profession would be made welcome. If Montreal lies in the way of travel of any of our readers, we hope they will call upon Mr. Bélanger, see what he is doing, and report their impressions in the *Annals*.

Mr. Hancock on Articulation and Day-Schools.—As our readers are probably aware, the proposition of establishing a day-school for the deaf and dumb in Cincinnati has been for some time under consideration. Mr. John Han-

* *Annals*, vol. xvii, p. 197.

cock, superintendent of public schools of that city, last year visited several schools for deaf-mutes, including the Boston, Pittsburg, and Cleveland day-schools, the Ohio and Clarke Institutions, and the American Asylum. This, certainly, gave him an opportunity of judging fairly upon the two important questions at issue, which were, first, What is the best method of instruction? and, second, Are day-schools as well adapted as institutions to promote the welfare of deaf-mutes? The conclusions reached are given in his annual report just published, and will have interest and value for our readers as coming from an intelligent outside observer, whose only aim seems to have been to arrive at the truth. After presenting the arguments upon each side, he gives his own conclusion with regard to the first point, as follows:

“If the limited observation and investigations I have been enabled to make entitle me to an opinion. I should say that the articulate method of teaching deaf-mutes can never be adapted to the masses of that class of persons. That most may be taught to speak I do not doubt, but with the congenitally deaf, or those otherwise deaf, who have forgotten all sounds, it must be done at an expense of an almost infinite amount of care and labor—at such an expense of labor, indeed, as to tempt one ‘to wonder how their parents could have been induced to allow them to go through so much to learn so little.’ It is within the knowledge of all who have had experience in teaching, how much more readily those whose sense of hearing is perfect learn through the eye than through the ear. To substitute, then, in the instruction of the deaf, for a language attractive, graceful, and expressive, one that can at best be but a mechanical imitation of that used by hearing persons, and which can be taken from the lips of the speaker only after a long and painful drill, seems contrary to the dictates of a sound philosophy; and, even after they have learned to speak, there can be but little doubt that this knowledge will be forgotten in no very great length of time, or, if not entirely forgotten, that the tones of the voice will grow more and more harsh and unpleasant, from the extreme difficulty of making the inflections of tones without the aid of a teacher. That very remarkable and gratifying things have been done by this method in training the more fortunate classes of the deaf every one will gladly acknowledge who has had the opportunity of witnessing some of the results of the training in the Clarke Institution. Pupils of the most advanced class in that institution seemed to catch the questions from their teacher’s lips as readily as though they were possessed of the

sense of hearing. The pupils of the Boston school, being under the care of their teachers but a small portion of each day, do not show as favorable results, yet some of its inmates are making good progress."

Upon the other question, Mr. Hancock decides against day-schools in all cases where, as in Ohio, ample provision is made in State institutions. The reasons assigned are substantially the same as those brought forward in the discussion of this subject at the Indianapolis Convention. He presents his conclusion in these words:

"I do not forget the comfort parents would derive from having their children educated at home, so that they may have a constant oversight of their welfare, and enjoy their society. Yet, notwithstanding this consideration, and it is a weighty one, I think the balance of advantages for having the class of children under discussion educated in the institutions prepared for their benefit is so decided, that every thoughtful parent will be willing to make the required sacrifice of present feeling for the future good of the child.

"I am clearly of the opinion that our present law for the admission of pupils into the State educational institutions ought to be so changed as to allow them to enter at an earlier age."

Visible Speech.—It is perhaps not too late for us to be of service to some of our readers by announcing that Mr. A. Graham Bell, whose article in the *Annals* last year upon his father's method of "Visible Speech"* excited so much interest, has opened an establishment in Boston for the purpose of giving practical instruction in this subject to philologists, missionaries, teachers of the deaf and dumb, and deaf-mutes. Mr. Bell's method of teaching articulation is now practised in five American institutions for the deaf and dumb with satisfactory results, and seems destined to come into general use. The terms for the course of instruction may be ascertained by addressing Mr. Bell, at 35 West Newton street, Boston, Mass.

Whipple's Natural Alphabet.—Through the courtesy of General Eaton, Commissioner of Education, we have re-

* Vol. xvii, p. 1.

ceived a copy of the "Natural Alphabet" recently invented, and, we believe, patented by Mr. Zerah C. Whipple, who has an articulating school for deaf-mutes at Mystic, Conn. The characters used in the alphabet are designed to suggest the actual positions assumed by the vocal organs in making the sounds, as in Professor Bell's method of "Visible Speech," of which this, it must be confessed, seems to be an imitation, and far inferior to Professor Bell's truly ingenious and useful "Universal Alphabetics," in point of simplicity, elegance, convenience, and variety of application. But we have no doubt that Mr. Whipple's pupils find this alphabet, as he says in his letter to General Eaton, a great aid in acquiring distinctness of articulation.

Amusements.—One of the subjects discussed at the Michigan Conference of Principals was Amusements. We are glad to notice that this important element of school life receives a good deal of attention in many of our institutions. The Ontario Institution is especially to be commended in this respect; it has a fund upon which every year it draws liberally for Christmas and other festivities. Descriptions of the Christmas proceedings last year were published in the Belleville papers, and Dr. Palmer wisely had these descriptions reprinted in circular form and sent to the parents and guardians of the pupils, thus at small expense and trouble making many who were not present sharers in the pleasures of the occasion.

We observe with pleasure that the appropriation for the Michigan Institution made by the legislature a few days ago contains an item of "two thousand dollars for books, engravings, maps, mottoes, and *amusements*."

Church Mission to Deaf-Mutes.—The *Church Journal* of Oct. 31, 1872, contains the sermon preached by the Rev. Dr. Thos. Gallaudet, rector, on the twentieth anniversary of the founding of this church. The sermon reviews the early history of the church, and gives a brief outline of

the important work that it has performed. Its peculiar organization, intended to benefit both deaf-mutes and hearing persons, has been very successful, and its rector, while burdened with the arduous duties of a large parish of hearing persons, has yet been able to promote in a wonderful degree the spiritual and temporal welfare of the deaf-mutes of New York, and at the same time to establish religious services for the deaf and dumb in several other cities and towns of the Union. More recently, a society called the "Church Mission to Deaf-Mutes" has been formed through Dr. Gallaudet's efforts, and has been incorporated by the legislature of New York. Bishop Potter is president of the society, and Dr. Gallaudet general manager. Its objects are to increase the number of religious services for the deaf and dumb throughout the country; to relieve deaf-mutes who are in sickness or trouble; to find work for those who are out of employment, and especially to provide a home for the aged and infirm. The home has already been opened in rented rooms; a building will be erected as soon as the necessary funds are obtained. The benefits of this home are to be national, and it is proper that means for its support should come from all parts of the country. It is certainly a noble charity, and one which we trust will be appreciated and sustained. As a suggestion of one way in which the good work may be helped, we will mention that last year the pupils and students of the Columbia Institution, by voluntary contributions of little sums at their monthly concerts, were able to bestow between sixty and seventy dollars for this purpose. They will doubtless give as much, or more, this year. Will not other institutions adopt the same course?

The Census of Ireland.—Noticing in the last report of the Ulster Institution an extract from the census of 1861, in which it is stated that in Ulster there are 245 persons "dumb, not deaf," (the number of the deaf and dumb being 1,704,) we wrote to the Rev. John Kingham, principal of the institution, asking whether this was not a misprint. He

replies that it was not, and gives further details of the census returns with regard to the persons thus classed. The whole number in Ireland reported as "dumb, not deaf," is 723, of whom 96 are said to be "dumb with paralysis," 270 "dumb with idiocy," 92 "dumb with both paralysis and idiocy," and 265 "dumb *without other defect*." In Ulster the returns are 27 dumb with paralysis, 91 dumb with idiocy, 34 dumb with both paralysis and idiocy, and 99 dumb without other defect.

The Ontario Institution.—The Canadian papers contain descriptions of the visit of the lieutenant-governor and legislature of Ontario to this institution. It was evidently quite an important occasion, the legislature having adjourned expressly for this purpose. A satisfactory exhibition of the attainments of the pupils was given, and then followed addresses by the governor and members of the legislature, who, without distinction of politics, united in warm praise of the management of the institution, and promised it their hearty support. We trust that one result of the visit will be the removal of the charge now made for the board of pupils, which deters many parents from sending their children to school, and yet brings but a small income to the institution.

St. Mary's Institution.—We learn with regret that St. Mary's Institution of Buffalo has recently lost two of its officers by death: Sister Mary Joseph, the teacher of articulation, and Sister Mary Nicholas, who was connected with the domestic department. Both were zealous workers in their labor of love, and the former, especially, had such a peculiar aptitude for her position that the loss is very deeply felt.

The Vienna Exposition.—The invitation given to American institutions in the last number of the *Annals* to send reports, etc., to the Vienna Exposition through the Bureau of Education, met with a cordial response from some of the

institutions, and we have had the pleasure of forwarding a collection of material which will certainly be regarded as highly creditable to our country. We wish, indeed, that all the institutions had contributed, so that the representation of American schools might have been complete: but enough was sent to show fairly what our institutions are and what they are doing.

The contributions were as follows:

American Asylum.—A complete set of reports, bound in four volumes, and the discussion on articulation before a committee of the Massachusetts Legislature, in 1867, (one volume.)

New York Institution.—[The contribution of the New York Institution was sent direct to the steamer at the Brooklyn navy-yard which was to convey the material to Europe, and as this number goes to press we are not informed of what it consisted.]

Pennsylvania Institution.—A volume of reports and a photograph of the buildings.

Indiana Institution.—A complete set of reports (two volumes) and the Proceedings of the Seventh Convention, (one volume.)

Iowa Institution.—A volume of reports and a photograph of the buildings.

Texas Institution.—A complete set of reports, (one volume.)

Columbia Institution.—A complete set of reports (one volume) and a portfolio of photographs of the buildings.

Minnesota Institution.—A complete set of reports (one volume)* and a photograph of the buildings.

Clarke Institution.—A complete set of reports, (one volume.)

National Deaf-Mute College.—A complete set of catalogues, etc., (one volume.)

* Mr. Noyes generously contributed his own copy, there being but two others in existence, one in the library of the institution and the other in the library of the State Historical Society.

American Annals of the Deaf and Dumb.—A complete set, bound in eight volumes.

The Silent World.—A complete set, bound in one volume.

All of these volumes were neatly, some of them very elegantly bound.

It has been asked what the final destination of these contributions is to be. The Commissioner of Education desires that at the close of the Exposition all the educational material shall be presented to the Austrian government. We have suggested that the portion relating to the deaf and dumb would find an appropriate depository in the Royal Imperial Institution for Deaf-Mutes in Vienna, and the suggestion will doubtless be adopted.

If an international convention of instructors of the deaf and dumb is held during the Exposition, as has been proposed, but not yet, so far as we are aware, definitely determined, President Gallaudet, who is now in Europe, will probably be present, and we hope that our American institutions will be represented by others also.

Reports Received.—We have received the recent reports of the Pennsylvania, Kentucky, Ohio, Virginia, Indiana, North Carolina, Illinois, Georgia, Missouri, Louisiana, Wisconsin, Michigan, Mississippi, Texas, New York Improved Instruction, Clarke, Arkansas, Oregon, Halifax, and Montreal Protestant Institutions, all which, with such others as may be received in season, we shall endeavor to review in the next number of the *Annals*.

AMERICAN ANNALS
OF THE
DEAF AND DUMB.

VOL. XVIII., No. 3.

JULY, 1873.

A SUMMARY OF THE RECORDED RESEARCHES
AND OPINIONS OF HARVEY PRINDLE PEET,
PH. D., LL. D.—I.

BY HENRY WINTER SYLE, M. A., NEW YORK.

Heu, quanto minus est cum aliis versari, quam tui meminisse!

ONE by one are passing away the pioneer teachers of the deaf and dumb in America. Gallaudet and Clerc, Cary, Jacobs, Hutton, and Stone, have gone to their reward. And now we see the lofty halls and spacious chapel, in whose erection their friend and associate—he whose name is forever identified with that of the New York Institution—took such pride, all draped in solemn black; from over the platform, where he so often stood with kindling eye and eloquent hand, to warn, to comfort, to command, there looks down upon us only the pictured effigy of the venerated face; but he—the hand is still, the eye is shut; Harvey Prindle Peet is, as runs the motto we read there, “Asleep in Jesus.”

Few are left who like him began their work and labor of love at the time when the American schools for the deaf could be counted on the fingers of one hand; when every young aspirant made a pilgrimage to Hartford to obtain from Clerc a training in the method of Sicard, and when, of the little band scattered on either slope of the Alleghanies, each knew every other face to face, had shared his

studies, and knew his views from his own lips. Gradually the circle enlarged, and they who formed it had to trust to their pens and their annual reports for information of each other's doings and thoughts. These were insufficient means; the *Annals* arose, and the desire of personal interchange of ideas brought about the conventions. But with the constant springing up of new schools—happily following the spread of population—distance again interposed its restraints. There are many in our profession who never saw Dr. Peet's face; many, too, of the younger generation, among those personally under his charge or associated with him in his labors, who have had scanty opportunities of familiar intercourse with him, more especially since his retirement from active duties. To such of us he is known only by the publications associated with his name; by the manuals we put into our pupils' hands; by the records penned for our edification, of his experience, his observation, and his researches, in his reports, in the *Annals*, and in the proceedings of the conventions; and by the notes of his extempore utterances, often as permanently valuable as his more carefully-prepared expressions, and fresher from the heart.

Than these there can be no more profitable matter of study for the teacher whose heart is in his work, and whose preferences are not limited by the bounds of personal experience; for the principal, upon whom press heavily the cares of an institution; for the investigator of social science, the student of philology, the theologian, the lawyer, the statesman. In the course of his long career, Dr. Peet was called upon to meet nearly every practical question that can arise in our profession; his conscientious thoroughness compelled him to subject to searching criticism every theory advanced, and led him to trace it back to its origin, often far in the dim past. There is nothing new under the sun; many of these questions have come up again and again since he first discussed them, and are even now in the field, with, it may be, a slightly-changed face, but yet substantially the same. With ardor born of the fancy that they had discovered some grand secret, hidden heretofore since

the foundation of the world, enthusiastic partisans have set forth again propositions which Dr. Peet had stated long before, and enunciated better, or which he had shown to be illogical or utterly devoid of foundation in fact. Had they humbled themselves to tread in his footsteps, they would have been saved the error, and we its infliction.

Dr. Peet was not given to mere theorizing. When he announces what should be done, it is not the dictum of a closet philosopher, or of a so-called teacher whose highest ambition is to drag through the weary hours of school with the least exertion, while fertile in inventing work for an ideal teacher to perform, expenditures for an ideal board of directors to sanction. It is the word of one who from personal and exhaustive trial, or from keen, watchful, and continued superintendence or inspection, has learned what leads most directly to success. His reasonings were based, not on theories, but on what he believed he had fully ascertained to be facts. He did not seek for facts to uphold theories, but submitted theories to the most rigorous test of reality. Nor was he satisfied with imperfect and incomplete premises whence to make deductions: he sought ever to obtain the most exact, minute, and recent information.

Still, while his published productions are thus invaluable for study, there are considerable difficulties in the way of ready reference to them. They are mostly detached essays or contributions, scattered through the pages of numerous periodicals, some of which, especially those of older date, are now not readily to be procured. Also, his attention was in many cases called to the same point again and again, and his conclusions were expressed on different occasions, each time with peculiar appropriateness to the circumstances calling out the expression. Thus, to obtain a just and adequate comprehension of his positions, and especially of the depth and solidity of their foundations, it behooves the inquirer to walk about the structure raised by his talent and his unwearied toil, and to scan it carefully on every side.

Many, even among the most diligent students of his

writings, must therefore have felt greatly the want of a connected outline of their topics, and the manner and result of his treatment of each. The task would, I had hoped, have been undertaken by some one intimately acquainted with the subjects and the man—one who could, from the stores of his own knowledge, produce illustration and comment; from the treasures of his memory, reminiscences of circumstances and recollections of utterances in the unrestrained and informal intercourse of daily life, which would have enhanced the interest and the value of the record.

Peculiar circumstances having, however, led me to undertake the task, I have not shrunk from the great labor required to perform it at once faithfully and concisely. The order pursued was adopted after very careful consideration. In filling up the outlines, I have used, as much as possible, Dr. Peet's own words, abstaining, however, from sprinkling my pages with quotation marks, and have carefully repressed any evidences of my own individuality. To link together the great variety of topics treated, I have been obliged to interpose here and there a few words; but reference to Dr. Peet's writings will identify as his own a very large part of the expressions employed, even those used in sketching his personal history. To facilitate such reference, I venture to hope the classified index I have prepared will be found useful. If the following sketch leads the inquirer to the study of the originals here briefly and imperfectly condensed, my work will not have been in vain.

Attention may fitly be first directed to Dr. Peet's

PHYSIOLOGICAL AND STATISTICAL INVESTIGATIONS.

The existence of a class so peculiar as the deaf naturally excites the attention of philosophical observers to physiological and statistical inquiries respecting their number, and the proportion they bear to the general population; the causes of the loss of their hearing, and the possibility of its restoration; and the effect of these causes, especially through this infirmity, upon their general health. To these points of inquiry is added, when they have been shown capable of education, the occupations in which they are most successful.

Such investigations were diligently prosecuted from the first establishment of the New York Institution by Dr. Akerly, its physician and the secretary of the board of directors; they engaged Dr. Peet's attention from time to time throughout his whole connection therewith. Their utility he defended on the score of the praiseworthy nature of a desire for knowledge on all points respecting the human race, and of their practical value in enabling the legislator and the philanthropist to know for how many they had to provide, together with the faint hope that, the causes of deafness being ascertained with precision, some of them might be found remediable or preventable.

The materials which he had to work with were, on the one hand, the records of his own and other institutions, especially the valuable mass of facts in the circulars of the Paris Institution; and on the other, the returns of the censuses of the United States in 1830, 1840, 1850, and 1860, and those of the State of New York in 1825, 1835, 1845, 1855, and 1865. The fullest, though not in all respects the latest, digest of these statistics, is to be found in the report of the New York Institution for 1853.

STATISTICS.

In the enumerations made by public authority a variety of errors were found, and despite precautions adopted at his suggestion, they continued to the last very considerable. But a careful collation showed that they were uniform and could be corrected, and, moreover, in some cases balanced each other, so that even the uncorrected returns could safely be taken as a basis for comparisons between large sections. The principal correction to be made is to double the number returned under ten years of age, and to increase the total by one-sixth.

The number of deaf-mutes among a population consisting of Europeans or their descendants varies from 350 to 800 in the million—that is, from 1 in 2,857 to 1 in 1,250; the average of Europe and the United States together is 1 in 1,441; that of the United States alone, 1 in 1,600. The

difference may be due partly to greater accuracy of enumeration in Europe, and partly to the influence of immigration into America, since very few deaf-mutes are to be found in the first stream of emigrants to any section; but may also be connected with the more remarkable discrepancy existing in the ratios between congenital deaf-mutes and those whose deafness arises from disease or accident. This ratio is, in Europe, 615 congenital to 154 adventitious* in the million of population, or 4 to 1; in the United States, 278 congenital to 222 adventitious, or only a little over 1 to 1. It is also observed that the ratio of males to females is 5 to 4, a similar preponderance of males occurring among the blind and idiotic; and that a close parallelism exists between the chances of loss of hearing and those of death, in each sex and at each age. Taking the period between the ages of 10 and 30 as that suitable for instruction, it was calculated from the census of 1850 that only two-thirds the number of deaf-mutes in the United States who should, when it was taken, have been under instruction, were in the institutions then existing. The number to be admitted to school annually should be one-sixteenth of that between 10 and 30, this being the proportion who are 12 and 13 years old, which age Dr. Peet considered the best for admission.

CAUSES OF DEAFNESS.

The striking discordance between the returns from various sections suggests inquiry into the natural laws to which it is due, and the variety of these is evident from a mere glance at the difference between the white and the colored population of our country. For instance, the white race are more liable to deafness and insanity; the colored, to blindness and idiocy.

*I venture to propose the epithet *adventitious* in contradistinction to *congenital* as a substitute for *accidental* (which does not completely represent the circumlocution "caused by post-natal disease or accident") in qualifying the term *deafness*. For the use of *adventitious* in this sense there is already authority in medical usage. In time it may be allowed to qualify the term *deaf-mute* also, as *congenital* now does.

The causes of deafness produced after birth are in general much more readily and accurately ascertained than those of congenital deafness. A difficulty meets us at the outset in determining to which class to assign certain cases. An average child, according to Dr. Wilde, is not attracted by audible sounds (as distinct from noises produced by percussion) till the fifth or sixth month. The delicate organization of hearing may be seriously deranged by obscure or unnoticed ailments; the development of children in the use of their faculties varies greatly, and parents are often unwilling to admit that their children were born deaf, and even to own that they are actually unable to hear, until the lapse of a considerable time dispels all hope. Thus, on the one hand, a child may be born deaf, and yet the deafness be ascribed to some ailment which occurred about the time it was first noticed; and, on the other hand, a child may lose its hearing at an early age, and yet be returned as born deaf.

Introductory to the consideration of this subject, an acquaintance with the mechanism of the organ of hearing is desirable. It can readily be acquired from the clear description, abridged from Dr. Wilde, given in the *Herald of Health*.

CONGENITAL DEAFNESS.

The most obvious and incontestable causes of congenital deafness are the intermarriage of near relations and hereditary transmission. Intermarriage increases the chances of deafness two or three times. There is much less tendency to such connections here than in Europe—partly from the force of public sentiment, even where they are not prohibited by law, and partly from the general scattering of families. The cases of hereditary transmission are numerous enough to be painfully surprising, but yet fewer than is generally supposed. The chance of the offspring of two congenital deaf-mutes being born deaf is 1 in 10; of a deaf-mute and a semi-mute or a hearing person, 1 in 130; while when the parents, though both deaf, were neither of them so from birth, the chance is no greater than among hearing persons, that is, about 1 in 1,500.

Of the other causes which have been assigned, some rest more upon popular belief than on scientific conclusions, for instance, influences acting on the imagination of the mother; and others are conjectural rather than established. There are few cases in which we can separate the influence of the many obscure causes which may have been at work, few causes regarding which we can reconcile the mass of apparently conflicting facts. Among the causes acting on the parents are location and climate, privation consequent upon poverty, and physiological unsuitability for each other, owing, for instance, to inequality of age.

ADVENTITIOUS DEAFNESS.

The diseases or accidents producing deafness after birth, reported at various American institutions up to 1854, were classified by Dr. Peet under four general heads. I have added after the name of each its percentage of the 1,310 cases discussed.

1. Affections acting locally on the organ of hearing, $34\frac{1}{2}$ per cent.
2. Affections acting upon the brain and nervous system, $22\frac{1}{2}$ per cent.
3. Causes whose precise action is doubtful, 16 per cent.
4. Unknown or doubtful, 27 per cent.

Under the first head is particularly to be noted scarlatina, which alone produced 20 per cent. of the whole number of cases. This prominence dates back only to 1830, when the disease appears to have entered on a cycle of unusual virulence; similar epidemics of other diseases have been noted.

Out of 496 cases classified according to the age at which deafness occurred, the number in which it was under one year was found to be 16 per cent.; between one and two years, 24 per cent.; between two and five years, 40 per cent.; five years and over, 20 per cent. A large proportion of the 40 per cent. returned as having become deaf under two years of age probably were congenital cases.

Under this head there was to be studied, not merely the diseases themselves and their mode of action, but also their

predisposing causes—the primary influences which induced departure from health and natural development. But only a little could be done in this matter, owing to obvious difficulties.

CURE OF DEAFNESS.

The anguish of parents on discovering even a tendency to deafness in a beloved child—due in great measure to imperfect knowledge of the possibility of education—leads them to grasp eagerly at every means which may avert or remove the calamity. While not a few quacks have thus reaped an abundant harvest, the highest resources, the most powerful agents of medical science, have also been skilfully and cautiously employed. But the final conviction, more or less strongly expressed, of Itard, Ménière, Wilde, and Morell, was, that though partial or very recent deafness *may* be alleviated, profound deafness is beyond the reach of aid except by miracle.

The principal means scientifically applied have been various liquids, the composition of one of which dates from Merle, 1786; cauterization by a *moxa*; perforation of the *membranam tympani*, as advocated by Delean; and catheterism of the Eustachian tube. To these I may add the application of electro-magnetism, in the hope of overcoming that paralysis of the auditory nerve whose obstinacy led Itard to exclaim in despair: “The ear is dead, and medical means have no effect on the dead.”

In a paper read before the Medical Society of the State of New York, June, 1852, Dr. Peet, after giving the statistics reprinted in the *Annals* the following October, and discussing briefly the causes and cure of deafness, concluded with an earnest appeal to medical men to turn their attention rather to its *prevention*, and to bear in mind that they were in a position to inflict greater injury on the system than quacks and old women, inasmuch as the resources at their command were more powerful than raw bacon, roasted onions, or the wool of a black ram's left foreleg.

PHYSICAL ACCOMPANIMENTS OF DEAFNESS.

The various physiological phenomena, effects or accompaniments of their characteristic infirmity, manifested by the deaf—such as their liability to consumption and insanity, and their chances of longevity—have been ably treated by Porter, Morris, and others. Dr. Peet contented himself with adverting briefly to that last mentioned. He noted, first, that in the earlier censuses the proportion over twenty-five years of age was smaller than that between fourteen and twenty-five, ascribing it to the circumstance that probably one-half of those in the first category were uneducated, and their systems wore out rapidly from the want of restraint, whether exercised by their own moral faculties or arising from family ties. Among children, too, the deaf suffer by comparison with the hearing, since the causes producing their deafness often debilitate their general health, and in many cases there is a scrofulous taint, and a liability in particular to pulmonary diseases. The period of danger past, they often attain a good old age.

The occupations suited to the deaf have also been exhaustively considered by others, particularly the lamented Collins Stone. Dr. Peet remarked that the majority of the men became farmers, and by far the greatest number of the women were engaged in household duties; and hence drew inferences as to the kind of practical education they should receive at school.

CONDITION OF THE UNEDUCATED.

Valuable as are the statistical facts collected by Dr. Peet, of far greater popular interest, and of more practical value to the majority of us, are his researches into the views regarding the deaf and dumb entertained from the earliest times down; into the actual state of their minds before instruction, especially with regard to a knowledge of language and religion; into the methods devised for their instruction, and the results attained under each; and into the social and legal position accorded or due to them.

From these inquiries he drew the principles governing

the methods and course of instruction he adopted. Their extent is to be gathered from many allusions in the course of statements or defences of his own system, as well as from the more formal and elaborate expositions he set forth. We will first follow our guide into the consideration of the phenomena presented by the intellectual and moral condition of the uneducated deaf, as determining the necessity and possibility of their education, and indicating the best means of imparting it.

Uneducated adults he divided, according to their social position, which in part depends upon their mental capacity and moral development, into four classes, viz : *first*, wanderers, sometimes doing well for a short time, but often degenerating into vagrants ; *second*, domestic drudges, too often ill used ; *third*, laborers, mechanics, or farmers, able to manage their affairs well, and sometimes heads of families ; and *fourth*, those, belonging mostly to the generation now past or passing away, cast with families of high character and intelligence, and raised by fortune above the necessity of labor.

While the consideration of some uneducated deaf-mutes would make one think, with Condillac and Sicard, they were mere walking machines, the intelligence in the ordinary affairs of life displayed by others might lead a superficial observer to deem education unnecessary for them. The fallacy of this judgment is obvious upon the slightest inquiry and reflection ; it is most clearly demonstrated by the thorough investigations prosecuted or collected by Dr. Peet into the mental condition of the deaf before instruction, and especially into their ideas upon religious subjects.

No one will deny that only through education the deaf can acquire an acquaintance with literature, with history, with all of art and science save the merest mechanical operations and the common products which are in this age brought to the doors of even the poorest. But in outward appearance they are so like other men—their infirmity having in general no such outward and visible badge as that of blindness has—it is hard to believe they are not actuated

by the same motives as ourselves, do not share the elementary knowledge and the beliefs which with us are so much a matter of course it requires an effort of memory to tell how they were received.

INNATE RELIGIOUS IDEAS.

A striking peculiarity meets the inquirer at once. Their ideas are concrete; they are capable of few generalizations or abstractions, and these the most simple. They can form judgments on ordinary affairs, but on higher moral points they cannot reason; on higher moral grounds they cannot exercise self-restraint. The most obvious principles of natural theology are sealed to them. Religion, the highest and almost universal prerogative of man, is beyond their ken.

Such conclusions had been reached by various inquirers, prominent among them the elder Gallaudet, Turner, and A. B. Hutton in this country, Montaigne and Bébien in Europe. Dr. Peet renewed the investigation in the winter of 1854-'5, proposing a series of questions to pupils in his three highest classes. Combining the replies to these with the testimony given elsewhere, he wrote: "We feel authorized by the evidence before us to deny that any deaf-mute has given evidence of having any innate or self-originated ideas of a Supreme Being to whom love and obedience are due, of a Creator or a superintending providence, of spiritual existences, or of a future state of rewards and punishments," or, I may add, of the purport of public and private worship.

Perhaps the only exception to the unanimity of inquirers is Dr. S. G. Howe, so justly distinguished as the preceptor of Laura Bridgman. This gentleman boldly declared that his remarkable pupil, despite the double affliction enclosing her mind with a wall which would have proved impenetrable to ability less rare and devotion less entire than his, yet "alone and unguided sought God, and found Him in the Creator." So amazing an assertion Dr. Peet criticized with severity, alleging his belief that her idea of a God, and even of a

Creator, was derived from school companions, unobserved by her teacher.

The testimony thus elicited is of value not only to the teacher of the deaf, in showing how urgent is the need of losing no time in imparting religious ideas; it is important, indeed decisive, in its bearings on a question of the highest interest to metaphysicians and theologians—the question whether there are any notions of the Deity and of the soul innate in the human mind.

In the inquiry as to the growth of the religious consensus of mankind, it has been debated whether it was handed down by tradition, or was an inevitable result of spontaneous development which led man, at a certain stage of civilization, to recognize a God in His works, and to infer his own immortality from the instinctive horror which thrilled him at the idea of extinction. The reasoners on both sides take for granted that certain elements of belief are natural to the human mind, and it is undoubtedly true that it grasps and clings to them; but that it accepts them when proffered is no proof that it can, unaided, reach out to and discover them. The inquiries just recited show that it cannot.

ORIGIN OF ARTICULATE LANGUAGE.

Closely connected with the inquiry into the origin of religion is that into the origin of language, for there can be no religion where there is no language—that is, no means whereby man can communicate his ideas to his fellows.

Dr. Peet held that when hearing children make vocal sounds, it is by a natural and instinctive exercise of organs given to that end. Herein is the germ of the faculty of speech, which they gradually develop by imitation, but which was fully developed at his creation in the first man, who came into existence with an adult mind as well as an adult body—being both physically and mentally the type of the highest perfection of the human race—and to whom speech was as natural an exercise of his organization to a desired end as was locomotion. This position he fortified by deductions from the phenomena exhibited by the uned-

educated deaf and dumb in the use and development of the language of gestures.

GESTURES A NATURAL AND COMPLETE LANGUAGE.

He maintained that the use of gestures to express ideas is a spontaneous result of the human organization, as much as is speech; that it is equally natural and instinctive, even among those who hear. Though among them it yields the pre-eminence to speech, this is due solely to the superior convenience of the latter. Its elements are few and simple, its syntax is a mere framework; but it can be developed to express the highest and most abstract ideas, to impart the completest mental and moral culture, as perfectly as can a vocal language, and entirely independently thereof.

Each language—that of articulation and that of action—has its advantages. The one is superior as an instrument to sway the mind by reasoning; the other the passions, by graphic delineation. But the language of gestures labors under the great disadvantage of not being capable of reduction to writing; it is handed down by tradition, and not always to its improvement.

GESTURES THE ONLY NATURAL LANGUAGE OF THE DEAF.

Moreover, speech—the use of articulate words—is natural only when acquired through the ear. To the deaf and dumb, by the deprivation of hearing shut off from it inexorably, it is positively unnatural. Their only true language is that which they instinctively create, the one outlet left through which their prisoned spirits can break forth—that of gestures. Whatever theory be embraced by their instructors, whatever restrictions imposed upon the use of signs, these will still be their vernacular. The language of articulate words, studied directly, or through a system of symbols (labial, manual, or signs) strictly corresponding to them in inflections and order, will be a foreign language, to be slowly and laboriously acquired, and, except in a few cases, used by mental translation. Words, even to the most proficient, are comparatively cold and dead. Signs alone are

for them warm, eloquent, awakening—instinct with living thought and feeling.

By “the deaf and dumb” Dr. Peet here, and in general elsewhere, means two classes only: first, congenital deaf-mutes, who have had no opportunity of acquiring verbal language through the ear; and second, those who became deaf at too early an age to have formed the habit of thinking in words, and thus share the mental characteristics of those in whom the deprivation is congenital. He insisted strongly upon the radical difference between these and semi-mutes, whom he defined as those who acquired language through the ear, and who, for the most part, also learned to read before the loss of hearing. Whether the practice of speaking be kept up or not, he did not consider essential; the true distinction lies in the possession of the precious faculty of internal speech—a faculty which once lost can never be regained, and which no amount of training can perfectly induce. To this distinction he could not recur too often or too forcibly.

All admit that it is only “true deaf-mutes”—to use the modern expression—who require a carefully-graduated course of instruction in even the simplest forms of verbal language. It was with regard to *their* peculiarities alone that the discussion of the nature of such a course and the instruments of imparting it—especially the place to be given to gestures, and the advisability of following with them the order of words—was conducted, in which Dr. Peet took so prominent a part. But in the consideration of the other great mooted point—that of teaching articulation—which more than any other now divides the instructors of the deaf, he deemed the distinction had not been sufficiently regarded, and in this connection he adverted to it again and again.

But before we proceed to the examination of the theories he held and the practice he pursued in the actual work of instruction under the influence of his maturing judgment, it will be well to glance at the steps by which that judgment was formed.

PERSONAL HISTORY.

The conceptions regarding the deaf and dumb entertained by the philosophers of antiquity were based upon the theory enunciated by Humboldt as, "Man is man only by means of speech." Upon this theory were based also the methods of the earliest teachers, who sought to introduce the deaf to society by training him to use articulate language, and to catch it from the lips of others.

Taking the means of communication that offered ready to his hands, De l'Epée found the language of gestures adequate not only to impart ideas of material objects, but also, when improved, to guide the mind of the mute directly to an acquaintance with the language of words, and to impress upon his heart the principles of morality and religion. The labor of his life, and that of his successor Sicard, was to establish a perfect correspondence between words and gestures by a system of methodical signs.

Repulsed from the schools where his own language was taught, Gallaudet judged the method he saw so successful in imparting another no less difficult equally adapted to his own, and transplanted to America the method, and a teacher, not of articulation, but of signs. The teachers trained by him and by Clerc naturally imbibed their views, and while, like them, modifying the stiffness of Sicard by giving full scope to vigorous imitative pantomime, adhered more or less faithfully to signs strictly corresponding to words, and declined to burden themselves with the heavy labor of teaching articulation.

The New York school was established too soon after that at Hartford for its founders to profit by observation of the success there attained, and a very natural leaning toward the method which had been pursued in the mother country for half a century in teaching their common language, with results almost as marvellous as those of Sicard, and which presented the advantage of being embodied in books, such as the Vocabulary of Dr. Watson, caused the first efforts made under their auspices to be on the English system. Dr. Watson's work was taken as the guide, and articulation

was laboriously essayed. Though the expectations formed were sadly disappointed, and, in particular, the attempt to teach articulation was so obvious and painful a failure that it was abandoned in a year, yet an unhappy spirit of estrangement from and rivalry with the Hartford and Philadelphia schools prevented such a comparison of results as would have manifested the superiority of the system of the latter. The main attention of the directors was also bent, not to the improvement of the corps of teachers, but to the erection of buildings. Aid for this purpose was finally asked from the State. It was granted on condition of the institution being subject to the inspection of the Secretary of State in his capacity of Superintendent of Common Schools, and that officer was authorized to visit other institutions, and suggest improvements to the directors at New York. The Hon. A. C. Flagg, the then incumbent, discharged the duty in a very conscientious and able manner. So convincing was the evidence he collected of the superiority of the French system that its adoption was at last agreed upon, and experts in it were sought, not only from Hartford and Philadelphia, but even from the fountain-head at Paris. In Dr. Peet a man was found singularly qualified for the arduous task of raising the institution from the low position to which it had fallen in every respect, familiar as he was with every detail of the management of both the intellectual and the domestic departments of a large establishment.

The new principal had naturally imbibed with alacrity the principles so ably expounded by Gallaudet and Clerc, and in the same school were trained the associates with whom it was his first care to strengthen his hands—the keen, analytical, and profound Barnard, the devoted, fervent, and eloquent Bartlett. But already in France a reaction was setting in against methodical signs, and at New York they found in Vaïsse, whose arrival had preceded Dr. Peet's by a few months only, an able exponent of the stage to which the French system had advanced in its native land. This little band, soon augmented by the earnest and saintly Cary, the accurate and scholarly Day, the sagacious and enterprising

Brown, and the clear and thoughtful Fay—a group indeed worthy to gather around the energetic and judicious Peet—studied with eagerness and ever-increasing fascination the captivating theories of Degérando, the masterly manual of Bébien.

Irresistibly were they led to confess that hitherto the work had proceeded on no fixed principles. The theory had been but imperfectly explored, the results but partially collated. In the method they had first received they discerned two grave defects.

Holding that the mind of the mute naturally associated ideas with visible representatives, Sicard had been content with finding such visible representatives in gestures, and had devoted his energies to creating a close and unnatural correspondence between them and words. Even his acute mind had overlooked the propositions that a visible ideographic language could be constructed of alphabetic constituents, written, or given by the manual alphabet; and that the language of gestures had an order, a syntax of its own, differing widely from that of the French language, still more the English. Again, the disciples of Sicard had been even more exclusive than their master; they had ignored his early practice, his latest avowals in favor of articulation.

But the time had gone by when articulation or action had exclusive champions, when one banner or the other floated solitary and defiant over every establishment. Even in the institution over which Sicard himself had so lately presided the practice was now in favor of articulation, of using signs always in their natural colloquial order, and of training the mind to think directly in words without the intervention of signs. At New York it was resolved to follow in the same course. Methodical signs were therefore discarded for a purely colloquial dialect, for all purposes; grammatical analysis was assiduously cultivated, and improvements, almost amounting to a new creation, were introduced into the system of symbols; and articulation was again faithfully taught. The second of these experiments won a permanent place in the system of instruction, and has become well nigh

distinctive of New York; but the energy thrown into the others, particularly the third, was before long relaxed in obedience to the dictates of experience.

Thus a full generation ago Dr. Peet had settled firmly in his mind the convictions regarding articulation and methodical signs, from which, though he kept his eyes ever open to facts, his mind ever accessible to arguments, nothing ever availed to swerve him, but in which he was strengthened year by year. We will consider them in order.

INVESTIGATION OF ARTICULATION.

The convictions impressed upon Dr. Peet on the subject of articulation by eighteen years' experience in the instruction of the deaf were stated in his report for 1840. Four years later appeared Horace Mann's celebrated assertion that "the institutions in Prussia, Saxony, and Holland were decidedly superior to anything in this country." This startling announcement was substantiated by the further assertions that, while American teachers taught the deaf to converse by signs, the German taught them substantially in all cases to speak as other men speak, and that this power alone could restore them to society.

The Hartford Asylum, the school most directly menaced, promptly met the attack by sending its principal, Lewis Weld, to reconnoitre the assailant's base of operations. New York was no less prompt; its next report pointed to the energetic efforts already made in this country, all ending in decisive failures, and to the care with which the experiments at Paris had been watched and information collected from Germany. With this preface appeared the elaborate and exhaustive report by Dr. Day—which at once became a classic in our literature, as did his second in its turn—showing from recent personal investigation by a thoroughly-competent judge that Mr. Mann's assertions, in however good faith uttered, were wild exaggerations. Still, that none might have a pretext to complain, a searching examination of the whole school was made, and a class in articulation and lip-reading formed from the most promising materials thus found. In a year it proved a failure.

In 1851, Dr. Peet—accompanied by the son so long his right hand, and now so ably filling his place, by Mr. Gamage, whose style of sign-making, in combined elegance and vigor, still gives us so exact an idea what his own must have been in his prime, and by two other deaf gentlemen educated under his care—made an extended tour in Europe, inspecting many schools which had not been visited by any previous American inquirer. Eight years later, the public mind having been excited by the same style of “traveller’s tales” as in 1844, Dr. Day was again commissioned to inquire into their foundation. In each case the results found to have been actually attained were such as to demonstrate the correctness of his previously-formed opinion, nor was it in the least affected by anything ever described in the careful watch he kept to the last upon the movement in this country.

So full a sketch has been given of Dr. Peet’s personal acquaintance with the facts, to whose testimony all unite in referring the decision of the articulation controversy, because it is one of the commonest assertions of the side to which he was opposed that the champions of the other, and especially he himself, treated the subject in the attitude of special pleading and ignored facts. A *résumé* of the results reached by Dr. Day and himself will be found in the *Herald of Health*, in so condensed a form that it is sufficient merely to refer to it before passing on to state the conclusions which he held and repeatedly expressed.

CONCLUSIONS REGARDING ARTICULATION.

The two fundamental errors of the American advocates of articulation he stated to be, first, rashly assuming exceptional cases, and these magnified by the excited imagination of inexperienced visitors, to be the measures of the general standard of attainment; and, second, failing to appreciate the radical difference between semi-mutes and deaf-mutes.

Though he declared that he found it next to impossible to convince the disciples of Horace Mann of the sincerity of the profession made by himself and the others they as-

sailed, yet he admitted fully and frankly that articulation was possible and desirable for certain classes of the deaf. These were the semi-mute, the semi-deaf, and a very few deaf-mutes, whose rare physical and mental organization gave promise that many years' devoted labor might afford valuable results. The semi-deaf should be trained early, and at home; the semi-mute, if gifted with good eyes, should learn lip-reading; both should have their articulation preserved and improved, though it could not be hoped but that their speech would always be unpleasant and unintelligible to strangers. The last class, the few extraordinary deaf-mutes, were prodigies; the individual attention they required was such as could not be bestowed at school. For the others, all that could be done was to encourage them to speak and read on the lips as often as circumstances and opportunities permitted.

These three classes together he estimated at fifteen per cent. of the whole number of the deaf. For the remaining eighty-five per cent. he held that articulation was forced and unnatural, and could not be made so good an instrument of mental and moral development, or even of teaching written language, as gestures. The visible and tangible movements of the organs of speech were far too difficult and indistinct to become congenial to those who had not formed the habit of associating them with ideas—a habit which, as we have seen, he maintained could be formed only through hearing. To the semi-mute, a written word recalled a spoken word; to the deaf-mute, articulation recalled the written form or some other visible symbol. Motions awakening no reminiscence of sound were as vicarious as the manual alphabet, and less distinct. In short, no amount of training in articulation and lip-reading could raise a deaf-mute to equality with a semi-mute.

ARTICULATING DAY-SCHOOLS—CONTRAST BETWEEN THE DEAF
AND DUMB AND THE BLIND.

The most extreme of the articulationists advocate that the deaf be collected only during school-hours, and isolated

from each other during the entire remainder of the time, boarding each in a separate family in the neighborhood of the school.

One of the foremost champions of this plan is Dr. Howe, who declares that "the blind become blinder and the deaf and dumb more deaf and dumb by association with each other." In the report for 1861 this proposition is discussed, in brief as follows. That the educated blind are far better placed among those who see than among the blind, no one doubts. Whether it is best for the blind while under instruction to be boarded out, it is not our province to inquire. But the circumstances of the deaf and dumb are very different. When educated, it is best for them to associate with those who hear. But before they can derive any benefit from such society they must be educated, and the surest, often the only, way to give them mental activity and development of ideas is association with each other. Here a remark is interposed as to the greater economy possible in a school for the deaf than in one for the blind, they being more capable of supplying their own wants. But to return.

This social aspect of the question is at once the least understood, and that which presents the strongest contrasts. As Dr. Peet elsewhere remarked, the misfortune of the deaf seems at first more tolerable than that of the blind, because we do not so readily take in its full extent; we can stop our ears as we can shut our eyes, but we cannot drive from our minds all that has entered through them, and to which no other channel would have given admission; chief, we cannot divest ourselves of the knowledge of words and the habit of using them as instruments of thought. The deaf have the text of the book of nature; the blind, the commentary of speech. Deriving their greatest enjoyment from general society, the blind bear their full share in social converse. But to the deaf, association with each other seems necessary, not merely from *esprit de corps*, but from the natural feeling which leads all persons to prefer, in a foreign country, the society of those who use their own language. In general society they are at a painful disadvantage, and still more

in public gatherings; for that articulation and lip-reading can restore them to society is utterly incredible.

Wherever speech flashes from mind to mind, the blind are at home; the advantage is with the deaf only where the main instrument of productive labor, of safety, or of enjoyment, is the eye.

Less ultra partisans of articulation and lip-reading asked why, since even Dr. Peet admitted that a large class of the deaf were capable of receiving instruction therein with profit, they should not be separated from the rest, and gathered into establishments where signs should be strictly prohibited, for it was evident that association with deaf-mutes and "the fatal facility of signs" created in them an indisposition to the use of the voice and a prejudice against lip-reading. His answer was, that the separation and prohibition would work no good; the great advantage of semi-mutes—the habit of internal speech—was not dependent upon the exercise of the physical faculty, and even for them the use of signs had a natural attraction and advantage.

THE METHOD OF USAGE OR INTUITION, ESPECIALLY IN COMMON SCHOOLS.

Some who admit the inutility of articulation yet maintain that ideas should be imparted only through words in their visible forms, written or spelled on the fingers, and all gestures should be discarded, save, at the outset, the simple act of pointing to visible objects when teaching their names, the import and use of words of a higher class being taught by seizing or making appropriate opportunities for their employment. Such was the method of Wallis, Deschamps, Recoing, and similar was that pursued by Dr. Howe with Laura Bridgman. It is undeniable, replied Dr. Peet, that very creditable results were obtained in such able hands; but the progress by this method, though sure, is very slow, and it is suited only to single pupils, on whom the teacher's whole attention can be concentrated.

Though there have at almost all times been accomplished advocates and exponents of this "method of usage," it is

only within a few years that it has acquired practical prominence; but when it did, the very existence of our institutions was menaced. The proposal was made that special schools be abolished, and the deaf and dumb sent to the nearest common school with their hearing brothers and sisters, to receive an impartial share, or it might be a little more, of the teacher's care and cuffs. It was asserted that an ordinary primary-school teacher could in a few months learn to teach a deaf-mute reading, writing, and arithmetic.

In France and Belgium a decisive test was speedily applied. Men who had won distinction in the regular profession, such as Valade-Gabel, had appeared as its enthusiastic advocates; its plausibility had enlisted the aid of would-be philosophers; its promises of economy, that of public officials. The French Minister of the Interior had even issued a circular proposing to dispense with the institutions. But a year's experiment sufficed; everywhere the failure was complete, save in a few rare cases of special ability in both teacher and pupil. A commission of the French Institute reported adversely to its continuance, in an elaborate review drawn up by M. Franck; and in Belgium, the Canon de Haerne, who had so zealously stemmed the popular current, had the satisfaction of seeing it turn, and, flooded by the increased interest excited by the inquiry, lift the institutions high on the tide of prosperity. A few enthusiasts, led by Dr. Blanchet, of Paris, persisted in the attempt; but so rapid and complete had been the reaction against it that it was not imitated in this country, and all Dr. Peet had to do was to record, with the added weight of his hearty approval, the judgment of Franck and De Haerne.

THE LANGUAGE OF SIGNS THE BEST MEANS OF DEVELOPMENT.

We will now trace Dr. Peet's views of the intrinsic value of the language of action, and follow his analysis of it into its elements, his exposition of its natural synthesis.

The resources of the language of speech, painfully imitated, and its visible equivalents, written and manual, laboriously conned, have thus, *when unaided by gestures*, proved

utterly inadequate, or adequate only under exceptional circumstances, not merely to the task of initiating the deaf-mute into their own use, but also to that of the complete development of his intellectual and moral faculties. The question how the calamity of deafness can be alleviated, resolves itself into compliance with the will of Providence. Reason would decide *a priori*, and experience abundantly confirms the decision, that their own language of gestures, their *sole* natural language, cultivated and improved, is to the deaf the best means of the full and rapid development of their faculties. The unfolding of the mental and moral powers of a deaf child thereby is as rapid, easy, and delightful as is that of a hearing child by speech. If we wait until a knowledge of words has been acquired, precious opportunities are lost, it may be forever.

Again, signs have proved the most ready and precise instrument of explaining and testing comprehension of words, phrases, and constructions. The means of teaching the laws of sentences are, first, examples to be committed to memory; second, writing on these models; and third, explanation of the rule. The exact meaning of the models can be made evident only by signs; only by them can the rule be stated and explained with clearness and precision. To give to written words cohesion, we can do no better than to imbed them in the cement of signs.

Signs thus afford two of the three grand requisites of communication between teacher and pupil; the third, frequent repetition of words and phrases in and out of school, is supplied by the manual alphabet and by reading and writing.

Here we may incidentally note that Dr. Peet regarded the single-hand alphabet, in its present form, superior to the other systems of dactylology which were successively brought to his notice by various inventors. The syllabic dactylology of his friend, Mr. J. R. Burnet, was given a trial in his institution, and it was found the elements could be easily acquired and some words rendered readily, but fluency was not to be attained, and in most cases it was highly perplex-

ing to the spectator. The grand objection was that deaf-mutes know nothing of *syllables*; they resolve words only into their component *letters*—an objection which he considered fatal.

ELEMENTS OF THE LANGUAGE OF SIGNS.

Though to a person unfamiliar with it the colloquial dialect of signs is almost utterly unintelligible, yet when the abridgments with which it abounds are expanded into their primitive forms, these are more than those of any other language self-explanatory, and when analyzed they are found to be the rational development, strictly in accordance with a few general principles, of a limited number of radicals.

The elements of the language of signs are classified as follows, beginning with the most easy and obvious:

I. *Natural Signs.*

1. *Indicative signs*: Pointing to visible objects.
2. *Naturally expressive signs*: Expressions of the countenance, motioning with the hands, and attitudes of the body prompted by strong emotions actually felt.
3. *Imitative signs*: Simulated expressions of countenance, and imitations of human actions and animal motions.
4. *Descriptive signs*: Delineation of inanimate objects, by imitating the way of using them, tracing their outlines in the air, or placing the hands in positions representing their forms.

II. *Conventional Signs.*

5. *Signs of reduction*: From the full pantomime representing an object or action, a simple, convenient and characteristic sign is deduced for colloquial use. Great variety is here possible, according to the idiosyncrasy of the person using the signs or the one addressed; but common consent soon establishes certain conventions.

6. *Signs of abstraction*: Exhibiting or pointing to a visible object for the purpose of bringing the attention to rest, not upon the object itself, but upon some quality to be ab-

stracted from it, which may suggest the form, color, dimension or motion, or some other property of another object.

7. *Metaphorical and allegorical signs*: For abstract ideas of a higher class.

8. *Grammatical signs*: For particles, inflections, prefixes, and affixes, to make signs correspond exactly with words.

DICTIONARY OF SIGNS.

A dictionary of signs has repeatedly been proposed and essayed, but the idea, exclaimed Dr. Peet at the fifth convention, is nonsense; no man, no committee, could make one of any practical value. The correspondence between signs and words, taken individually, cannot be made exact. Many words change their meanings according to the context, and therefore require a variety of signs. Again, a single word may express a complex idea, to be fully rendered only by a group of signs; and *vice versa*, a single sign may suffice to express a group of words. From this condemnation he excepted the mimography of Mr. George Hutton, which he thought might, when further developed, prove of essential service.

His great objection to the attempt to construct a system of verbal descriptions was, that it would, as in the hands of De l'Épée and Sicard, end in introducing an exclusive system of methodical signs; a result which he deprecated. Before examining the grounds of his opposition, we will glance at his exposition of

THE SYNTAX OF SIGNS.

The natural language of signs, he maintained, has a syntax of its own, a part of its very essence. The most remarkable points in which it differs from English are the following:

1. The *order* is inverted, approximating to that of Latin and Greek.

2. As in Hebrew and some other ancient languages, in a narrative the *time* is marked once for all.

3. There are no *variations* of radicals to denote the part of speech.

4. There are no *inflections* for number, gender, case, person, tense, mood, or voice.

5. The *pronouns* and particles are little used.

USE OF METHODOICAL SIGNS.

The peculiarities of the natural language of signs just mentioned, and especially the absence of inflections and omission of particles, and the inversion of order, detract greatly from its utility as a mode of communication and instrument of thought for persons living in an English-speaking community. Especially is it likely to lead them to write in the order of signs, disregarding, moreover, the words and distinctions, to equivalents for which they have not been accustomed; and in the first lessons in language it is liable to keep the pupil from paying sufficient attention to these minutiae ever to get them impressed on his mind.

Dr. Peet was fully sensible of and openly admitted this danger. He repeatedly declared that a familiarity with English words, and a habit of thinking in them and in the English order, were among the principal ends to be sought after; he impressed upon his associates the necessity of disusing signs, gradually indeed, but as rapidly as their place could be supplied by words; upon his pupils, the importance of acquiring at school the habits of mind particularized above, and of mingling, when they left, with the hearing community, which had so great a preponderance in numbers and culture.

Maintaining all the time the superiority of the natural language of signs as a medium for the communication of ideas imparted, without regard to the words in which they might be expressed, he not only admitted but advocated the employment, to impress upon the mind the idea and form of phrases and sentences, of methodical signs; that is, of a system of signs exactly representing words, in which every inflection and particle was emphasized, and which were made *in the order of the words*. No instrument, he

declared, could be substituted for methodical signs in teaching the first principles of written discourse.

DISCUSSION WITH MR. JACOBS.

While thus admitting to the full the value of methodical signs at the pupil's first introduction to language, he held, however, that at an early day they should be discarded, and the pupil led to rely upon words directly, to think in them, and in their order. Here he was taken up by Mr. Jacobs of Kentucky, who held that their use should be continued until the habit of thinking in the English order whenever he proposed to express himself in words was firmly fixed in the pupil's mind. The discussion arising hence was carried on with great ability and earnestness, and with the most perfect courtesy, on both sides, through six numbers of the *Annals*. It is difficult to read any article in this series without being inclined to adopt the writer's view, so luminously and cogently is it stated; difficult, too, to divest the main question of the numerous issues joined at every step, where nearly every fact was disputed, every illustration and analogy adduced sought to be explained away; still more difficult to condense what two such master minds have evolved. If I should be found not to have adequately set forth the questions at issue, I hope for indulgence. I have substituted the word "gesture" for "sign," though it is less strictly correct, on account of the other meanings of the latter word involved.

The discussion turned on a metaphysical question—the conception of written words in the mind of a deaf-mute.

The contestants agreed that as a deaf-mute learned the meaning of a word through a gesture, he at first associated the word with the gesture, which for a time stood to his mind between the word and the idea, in whichever order the series was taken. But only to this did the agreement extend.

Dr. Peet held that the association between the written word and the gesture, to a deaf-mute, was the same as that between a Latin word and the corresponding English word

to a boy learning Latin ; they were synonymous direct representatives of the idea. Mr. Jacobs held that it was the same as that between the written word and the corresponding spoken word to a hearing person ; in each pair, the latter alone was the direct representative of the idea.

Dr. Peet held that the association could be broken, the gesture dropped, and the idea attached directly to the word. Mr. Jacobs held that it was permanent, so that the gesture always was the medium between the idea and the word.

Dr. Peet held that such a state of mind could be reached that the word should recall the idea, and that, the gesture. Mr. Jacobs held that to the last the word recalled the gesture, and that, the meaning.

Finally, Dr. Peet's objections to the prolonged use of methodical signs may thus be summed up : they were not natural to the deaf-mute mind, being not a home language, but one taught at school, and as arbitrary and unintelligible as written characters ; their order, differing from that of the natural language, obscured the meaning ; the introduction of particles and inflections was bewildering and misleading ; their syntax being that of speech, they required a previous familiarity with the thought expressed. They led to illusive results, for the pupil might write correctly from dictation, or repeat in signs a written sentence, without in either case having the least comprehension of the meaning of the sentence, however accurate his knowledge of the individual words. They required the difficulties of language to be removed by the teacher to a much greater extent than if he used colloquial signs, and they kept the pupil from thinking directly in words. Colloquial signs were much surer and less laborious, and there was no material disadvantage arising from the difference of order, *provided* the teacher was faithful in using words habitually as fast as they were understood.

HOW NOT TO DO IT.

THE best method of organizing and governing an institution for the deaf and dumb has frequently been discussed in conventions, in reports, and in the pages of the *Annals*; yet there has never been any difference of opinion upon the subject among the members of the profession. Widely as we may disagree with respect to systems of instruction and some other matters, there is one point upon which we are all united, viz: that the principal or superintendent of an institution should have the entire responsibility of its management, and should be unhampered in his control over all its departments. Wherever an institution has been organized upon this plan, under a competent head, with competent assistants in the several departments, it has successfully accomplished the purposes for which it was established; wherever, on the contrary, the responsibility of the management has been divided between a principal on the one hand and a superintendent, steward, or matron on the other, or the government in matters of detail has been carried on by committees of the board of trustees or directors, confusion, dissension, and failure have been the consequence.*

It is not proposed in this article to state the reasons why divided responsibility and committee government almost inevitably produce evil fruits, nor to set forth in detail the proper method of organization. These matters have both

* It is stated in the last report but one of the New York Institution that on account of the large number of pupils and other inmates of the institution. (more than six hundred altogether,) it has been found necessary to divide the care and responsibility, and that two independent departments have therefore been organized—the intellectual and the domestic: the former under the control of the principal, the latter governed by the resident physician and superintendent. How the experiment succeeds in the New York Institution the writer is not informed: it may possibly be that the immense size of that establishment makes it so far an exception to the general rule as to render possible a certain degree of success: but it is a well-known fact that the experiment has been tried again and again in other institutions, East and West, North and South, and always with the same result.

been treated in a way that leaves nothing more to be said with regard to them in the report of a committee presented at the Fourth Convention of American Instructors of the Deaf and Dumb, and in the able paper read by Dr. Gillett at the Seventh Convention. The present writer's purpose is merely to bring to the notice of the readers of the *Annals* a code of "Rules and Regulations" recently adopted by the trustees of an American institution, which, in their main features, seem to afford as good an illustration as could easily be found of the manner in which an institution for the deaf and dumb ought *not* to be organized.

With this preface, which is longer than it was meant to be, let us turn our attention to the regulations in question.

They have at least the merit of brevity, being comprised within a little square pamphlet of eight pages. The objectionable rules will either be quoted *verbatim*, or their purport will be given in a fair summary.

"In order," says the introductory paragraph, "to secure the greatest degree of efficiency and regularity in the internal management of the institution, the same is hereby divided into two departments, to wit:

"1. *The Educational ; and,*

"2. *The Domestic.*"

—a plan which the unhappy experience of every institution in which it has hitherto been tried has proved to result in the *least* degree of efficiency and regularity.

The next paragraph gives an intimation of the school-boy and school-girl position that both principal and teachers are expected to occupy, and foreshadows the second element of discord which the trustees have introduced into their system of management. Division of responsibility has been the source of trouble in some institutions; government by committees in others; this institution is to be burdened with the two evils combined:

"All officers of the educational department shall reside in the house, and not absent themselves therefrom during school-hours, without the knowledge and consent of their respective superiors; the teacher receiving the same from the principal, and the principal from the president [of the board of trustees], or chairman of the committee on instruction."

The members of our boards of trustees are supposed to be "practical" men; it is strange it did not occur to the authors of this regulation that a slight difficulty might arise in carrying out that portion of it which relates to the principal. In case the principal finds it necessary to absent himself from the house during school-hours, how is he to obtain the permission of his "superiors" (neither of whom reside in the building) without violating the rule itself in going to request the permission? Supposing this difficulty to be met by the employment of a messenger, it is easy to see that a much longer time would often be consumed in sending the messenger and waiting for his return than would be required for the transaction of the business which might call the principal from the building. How far better would it be for the board to appoint as principal a man in whom they had confidence, and then let him judge for himself of the circumstances in which it might or might not be his duty to be absent for a time from the house!

Next comes the heading "*Educational Department*," and under this the duties of the principal are defined with particularity. He is to direct the intellectual and physical instruction of the pupils "according with a plan to be submitted to, and accepted by, the committee on instruction;" he is to be responsible to the board of trustees for the execution of "such measures [in this department] as they may from time to time direct;" he is to be "the organ of official communication between the board and the teachers in matters pertaining to the department of education and care of pupils;" he is to select books, charts, etc., for the use of classes, "subject to the sanction of the committee on instruction;" and to perform in the same subordinate manner such other duties as usually belong to the principal in connection with the work of instruction. Beyond this he has no power and no special duties, except that he is to regulate the temperature and ventilation of the school-rooms, inform the physician and president of the occurrence of sickness or accident to any of the inmates, keep a record of applications for admission or discharge, conduct correspondence with

parents and guardians, "attend to such visitors as may more particularly require such attention," prepare an annual report, and designate teachers in rotation to have charge of the pupils during recess and after school-hours. Cases of disorderly conduct are to be reported by the teachers to the principal, but what he is to do about them does not appear; "the infliction of corporal punishment is positively prohibited." The final rule with regard to the principal seems to impose upon him responsibilities to which the power conferred is not at all commensurate:

"Finally, the principal shall exercise a general supervision over the concerns of the school, endeavoring by his example and influence to introduce punctuality and order and to infuse energy into all its departments; be ready at all times to assist the teachers and matron with advice or directions; report any neglect of duty on the part of subordinates, and see that the regulations made by the board of trustees are faithfully executed."

Under the heading "*Domestic Department*," the position and duties of the matron are described.

The matron is to be selected and appointed by the board of governors, (which seems to be one of the standing committees of the board of trustees,) and is to be directly responsible to that board for the manner in which she performs her duties. In her control of the domestic department she is to be entirely independent of the principal, and everybody else except the board of governors. This, however, is an important exception: she is required to present to the board of governors weekly or semi-weekly, as they may direct, a list of "wants" for the current and ensuing week, which must be endorsed by the board before being purchased. If this rule is strictly enforced in practice, it must be the occasion of great inconvenience and annoyance, for it is utterly impossible in a household of seventy-five or a hundred inmates to make out a list in advance of everything that will be needed for a week to come.

Two of the rules of the domestic department remind the principal and teachers again that they are not supposed to be men and women of high character, capable of taking

care of themselves, worthy of such trust and confidence as are usually reposed in those who make the instruction of youth their profession, but, on the contrary, imply that they are looked upon as children, and are to be treated as such. It is true that one of these rules, fixing the hour at which the doors of the building shall be closed at night, does not *say* that teachers are required to be at home before 10 o'clock P. M.; but the other rule, prescribing the hours of meals for officers and pupils, does say that "these hours shall be strictly enforced, and non-compliance with the same, except through sickness or other unavoidable cause, shall forfeit the meal." The light in which the officers of the educational department are regarded by the board having been thus indicated, the concluding regulation with regard to the matron reads like gentle sarcasm :

"Finally, in order to advance the harmonious working of the several departments, it is expected of the matron to show such deference towards the principal and teacher, and to enforce the same on the part of the domestics, as their positions of authority respectively demand."

The remaining regulations, pertaining to the teachers, may be hastily passed over. One of them repeats the prohibition against absence during school-hours without permission ; another directs that during school-hours teachers shall devote their entire energies to the performance of their assigned duties ; another has reference to their care of the pupils during recess and after school-hours ; while the last says it shall be their duty fully to conform to the rules and regulations laid down for the domestic management of the institution.

It is perhaps proper for the writer to say that though for good and sufficient reasons he wishes this paper to be published without his name, it is not written in a spirit of malice or ill-will. He is not and never has been connected in any way with the institution whose regulations are criticized ; he has no acquaintance with any of the gentlemen who compose its board of trustees. He presumes that these trustees, like others whom he has known to attempt the government

of an institution in a similar manner, are excellent men, full of zeal and benevolence, giving a great deal of time and labor to the service of the institution without compensation, and sincerely desirous to promote its best interests. It is because their zeal is without knowledge of the right kind, their benevolence unguided by an understanding of the real necessities of the case, that they exercise the authority placed in their hands in a manner so fatal to the prosperity of the institution. They have not been willing to learn wisdom from the experience of others; perhaps it will yet be taught them by their own.

REPORTS OF AMERICAN INSTITUTIONS FOR THE DEAF AND DUMB.

BY THE EDITOR.

WE have before us the recent reports of the Hartford, New York, Pennsylvania, Kentucky, Ohio, Virginia, Indiana, North Carolina, Illinois, Georgia, South Carolina, Missouri, Louisiana, Wisconsin, Michigan, Mississippi, Texas, Alabama, Minnesota, New York Improved Instruction, Clarke, Arkansas, Maryland, and Montreal Protestant Institutions. The Boston Day-School and the Oregon Institution do not publish separate reports of their own, but the former is noticed in the report of the Massachusetts State Board of Education (as are also the American Asylum and the Clarke Institution) and in the report of the Boston School Committee; the report of the Oregon Institution is included in that of the Secretary of State.

Instead of reviewing these reports separately, as has been our practice heretofore, we propose this time to consider them by topics, believing that in this way better economy of space will be secured, as well as more unity and greater convenience for reference. Of course the review cannot be made exhaustive; disregarding local matters almost altogether and passing over some points of general interest, we endeavor to select only the most important of the subjects discussed.

THE CENSUS OF 1870.

The census is referred to in several of the reports, and the opinion is generally expressed that it contains numerous errors of omission. This opinion seems in some cases to be based upon "rough estimates," "past experience," and other generalities, which the Commissioner of the Census very reasonably maintains should have little weight in comparison with the carefully-prepared tables of the responsible census-takers, who have sworn that their statements are correct. But where definite assertions are made and precise figures are given, as in the Illinois and Louisiana reports, the argument of the Commissioner does not hold good, and the inference is natural that if such great errors were committed in these States they have occurred elsewhere also. Dr. Gillett says that of the two hundred and ninety-four pupils in attendance at the Illinois Institution last year only ninety-seven are to be found on the census returns. Mr. McWhorter says that of the twenty three new pupils who have entered the Louisiana Institution since the census was taken, seven were enumerated and sixteen were not. What can be said in reply to such facts as these?

CAUSES OF DEAFNESS.

The Kentucky, Ohio, Illinois, and Minnesota reports give the causes of deafness, so far as ascertained, of all the pupils who have been educated in these institutions; the Indiana report gives the same statistics of the pupils now in the institution; while the Pennsylvania report gives them in respect to its new pupils. These make a total of 2,706 cases, of which the assigned causes of deafness are as follows:*

Congenital.....	924	Fever.....	104
Cause not ascertained.....	294	Sores in head.....	81
Scarlet fever.....	291	Measles.....	74
Sickness, (not specified).....	154	Colds.....	65
Spotted fever, (cerebro-spinal		Typhoid fever.....	64
meningitis).....	131	Accidents, (not specified).....	45
Brain fever.....	121	Inflammation of the brain.....	44

* In compiling the table some slight changes in nomenclature have been made for the sake of uniformity.

Whooping-cough.....	40	Dysentery.....	2
Spasms.....	36	Typhus fever.....	2
Scrofula.....	23	White swelling.....	2
Congestive chills.....	19	Earache.....	1
Hydrocephalus.....	17	Eating jimson seed.....	1
Inflammation.....	16	Neuralgia.....	1
Use of quinine.....	13	Rheumatism.....	1
Bilious fever.....	12	Bronchitis.....	1
Pneumonia.....	12	Calomel.....	1
Erysipelas.....	12	Cruelty.....	1
Teething.....	10	Gout.....	1
Mumps.....	10	Swimming.....	1
Diphtheria.....	9	Lightning.....	1
Ague.....	8	Jaundice.....	1
Nervous fever.....	6	Scald head.....	1
Rickets.....	6	Inflammation of bowels.....	1
Paralysis.....	6	Catarrhal fever.....	1
Chicken-pox.....	4	Pernicious fever.....	1
Catarrh.....	3	Yellow fever.....	1
Cholera infantum.....	3	Worm fever.....	1
Spinal disease.....	3	Apoplexy.....	1
Dropsy.....	3	Sunstroke.....	1
Croup.....	3	Sea sickness.....	1
Worms.....	3	Sore ears.....	1
Small-pox.....	3	Cold plague.....	1
Gradual decadence.....	2	Cramps.....	1
Congestion of spine.....	2	Cholera.....	1

Mr. MacIntire calls attention to the fact that in the Indiana Institution the proportion of pupils who have become deaf from disease or accident is much greater of late years than formerly. The recent statistics of other institutions, so far as they are given in the reports before us, indicate that the statement holds good elsewhere also. In the Minnesota Institution, the history of which covers a period of ten years, less than one-third of the pupils are reported as having been born deaf. Of the fifty who entered the Ohio Institution last year, only thirteen were reported as congenitally deaf. The table of statistics given above, which in the majority of cases relate to the last twenty years, prove the same thing. We quote Mr. MacIntire's remarks upon this point:

"In the first nine years of the history of the institution, out of 280 pupils admitted, the deafness of 154 was congenital, while only 126 lost their hearing from other causes. By a reference to the reports of several of the older institutions of this class, I find that of 2,347 recorded cases, 1,236 were congenital, while only 1,111 became deaf after birth by disease or accident. This shows a preponderance of congenital cases, and corresponds very nearly with the facts in the early history of

our own institution. Dividing the time since this institution was first opened into three equal periods, we have the following result:

	<i>Congenital.</i>	<i>Accidental.</i>	<i>Unknown.</i>
1844 to 1853.....	154	126	15
1854 to 1862.....	149	127	23
1863 to 1872.....	112	199	19
	415	452	57

"During the first and second periods, as appears above, the cases of congenital deafness were much the most numerous, but during the period from 1863 to the present time the case has been reversed, and the number of the latter has been nearly double that of the former. I know of no way of accounting for this except on the ground of the increased prevalence and fatality in producing deafness of that scourge to children, *cerebro-spinal meningitis*. Ten or fifteen years ago it was hardly known as a cause of deafness; now it is the most prevalent cause.

"In 958 cases of accidental deafness reported as occurring in the American Asylum, at Hartford, previous to 1864, only fifty were produced by spotted fever, and in the New York Institution, in 494 cases, only two are assigned to this cause. Then scarlet fever was the predominant cause of deafness in those institutions, and it may be so still; but in our own State the prevailing cause is spotted fever."

Fifty-three of the four hundred and fifty-two cases of adventitious* deafness in the Indiana Institution are attributed to spotted fever. Of the thirty-seven cases of adventitious deafness among the new pupils admitted to the Ohio Institution last year, eleven are ascribed to the same disease, while only four are charged to scarlet fever. Mr. Rising, of the New York Institution for Improved Instruction, mentions the prevalence of spotted fever a year or two ago as the reason why a majority of the new pupils admitted to that institution last year were semi-mute.

AGE WHEN DEAFNESS OCCURRED.

The Ohio, Indiana, Illinois, and Minnesota reports give the ages at which deafness occurred in the cases of 2,116 pupils, as follows:

* We gladly adopt the term *adventitious*, suggested by Mr. Syle. (see note, page 138 of this number of the *Annals*.) and hope it will come into general use.

Congenital.....	860
Under one year of age.....	296
Between one and two years.....	372
" two and three "	191
" three and four "	102
" four and five "	88
" five and six "	58
" six and seven "	44
" seven and eight years.....	51
" eight and nine "	15
" nine and ten years.....	12
" ten and eleven years.....	8
" eleven and twelve years.....	4
" twelve and thirteen years.....	2
" thirteen and fourteen years	5
" fourteen and fifteen "	2
" fifteen and sixteen "	3
" sixteen and seventeen "	1
" seventeen and eighteen "	1
" twenty and twenty-one "	1

CONSANGUINITY OF DEAF-MUTES.

The 893 pupils who have been connected with the Illinois Institution represented 689 families, of which—

2 families contained 4 deaf-mutes.
17 " " 3 "
62 " " 2 "
608 " " 1 "

The pupils who had deaf-mute relatives were as follows:

Five had father and mother both.....	deaf and dumb.
Three had the father only.....	" " "
One had the father, mother, and one sister....	" " "
Three had the father, mother, and one brother.	" " "
Forty-one had one brother.....	" " "
Thirty-five had one sister.....	" " "
Twenty-six had one brother and one sister....	" " "
Three had three sisters.....	" " "
Nine had two sisters and one brother.....	" " "
Thirteen had two brothers.....	" " "
Six had two sisters.....	" " "
Three had two brothers and one sister.....	" " "
One had one brother and one cousin.....	" " "
Three had two brothers and one cousin.....	" " "
One had one brother, one sister, four cousins..	" " "
One had one brother, one sister, three cousins.	" " "
Three had two brothers and three cousins.....	" " "

Nine had one cousin.....	deaf and dumb.
Five had one second cousin.....	“ “ “
Two had one brother, one sister, one cousin...	“ “ “
One had one brother and one second cousin...	“ “ “
One had one sister and one cousin.....	“ “ “
Three had one brother and three third cousins.	“ “ “
Two had one third cousin.....	“ “ “
One had four second cousins.....	“ “ “
One had four second cousins and one sister...	“ “ “
Two had two second cousins	“ “ “
Two had one brother and two great uncles...	“ “ “
Two had one sister and two great uncles.....	“ “ “
One had two uncles..	“ “ “
One had two uncles and one aunt....	“ “ “
One had two aunts and one uncle.....	“ “ “
One had one aunt.....	“ “ “
One had two great aunts.....	“ “ “
One had one grandmother.....	“ “ “
One had one grandmother's cousin.....	“ “ “
Three had brothers of defective hearing.	
One had mother whose hearing gradually failed.	

Of the thirty-six new pupils who entered the Pennsylvania Institution last year, the father and mother of two were both congenital mutes; the father has a brother and the mother has a brother and a sister in the same condition. All of their children, four in number, were born deaf. The brother of the father also married a congenital deaf-mute, and has three deaf children.

CONSANGUINITY OF PARENTS.

Of the 893 pupils of the Illinois Institution, 59 were children of consanguineous parents, as follows :

42	the children of parents who were first cousins.
9	“ “ “ second cousins.
5	“ “ “ third cousins.
2	“ “ “ fourth cousins.
1	the child of parents who were uncle and niece.

In families having more than one deaf-mute child, the relationship of parents was as follows :

- In 5 families having 2 mutes the parents were first cousins.
- In 4 families having 3 mutes the parents were first cousins.
- In 1 family having 3 mutes the parents were second cousins.
- In 2 families having 2 mutes the parents were second cousins.
- In 1 family having 4 mutes the parents were fourth cousins.

With the thirty-six pupils who entered the Pennsylvania Institution, the instances of relationship between the parents before marriage were four. In one case they were first cousins; in three others, second cousins; and in all four cases the children were born deaf. In one of the families, where the parents were second cousins, there are four deaf-mute children. In one family where the parents were not related, and where there are no connections deaf and dumb, there are three mute children, (one girl and two boys,) and in another, two, (one of each sex.)

In six cases out of the thirty-one congenital deaf-mutes of the Minnesota Institution, the parents were cousins, and in two cases out of the six there are still other children in the family who are either deaf and dumb or blind.

NATIONALITY OF PUPILS.

The Illinois and Minnesota reports give the extraction of their pupils so far as ascertained. From the tables given, relating to 982 cases, we collate the following:

American.....	664	Indian.....	3
German.....	120	Negro.....	3
Irish.....	100	Prussian.....	2
English.....	24	Canadian.....	2
Swedish.....	23	Swiss.....	1
French.....	11	Polish.....	1
Scotch.....	9	Finnish.....	1
Norwegian.....	6	Italian.....	1
Jewish.....	5	Russian.....	1
Portuguese.....	4	Mexican.....	1

HOW SHALL THE UNEDUCATED DEAF AND DUMB BE REACHED?

This question, as usual, is discussed in several of the reports. First, in order to ascertain who and where the uneducated deaf and dumb are, Mr. Noyes, of Minnesota, and Dr. Carter, of Mississippi, recommend that it be made one of the duties of the assessors of State taxes to enumerate in their returns all the deaf-mute youth between the ages of five and twenty-one, giving also their post-office address. Mr. Connor, of Georgia, would have the assessors enumerate all the deaf and dumb, whether over or under age. Then, to make known the existence of the institution and induce

parents to send their children to school, the advantages of circulars addressed to legislators, postmasters, district judges, county officers, clergymen, teachers, and others, of public exhibitions in different parts of the State, and of employing a special agent, are urged by several principals. The course last named is followed by the city of Baltimore, and has been found very efficacious; and in one of the counties of New York "there is a respectable and intelligent deaf-mute farmer who employs his intervals of leisure in travelling from place to place, seeking out uneducated deaf-mutes, and advising their parents to send them to the institution. Many of these parents," says Dr. Peet, "have informed me that but for him they would never have known anything of the institution or of the benefits it is capable of conferring, and have added that they shall never cease to feel grateful to him as the means of bringing their children within its influence." Dr. Peet would "rely largely on correspondence with former pupils of the institution residing in different parts of the State, as the great interest they take in their companions in misfortune induces them to make very general inquiries in regard to them." Compulsory education is advocated by Mr. Widd, of Montreal. It is worthy of notice that at the Michigan Conference of Principals, of which a stenographic report is given in connection with the report of the Michigan Institution, compulsory education was warmly advocated by several speakers, and a resolution in favor of it was unanimously adopted; which indicates that this doctrine has made some progress since Mr. Noyes read his paper on the subject at the Indianapolis Convention.

FREE EDUCATION TO ALL.

The impolicy and injustice of making a discrimination between rich and poor pupils, requiring the former to pay for their board and tuition, and the latter to obtain a certificate of poverty from the overseer of the poor or some other official, are urged in the New York and Mississippi reports. We quote Dr. Peet's cogent statement of the arguments in behalf of free education for all:

" 1st. There are probably many pupils who are detained at home beyond the best age for instruction, because their parents, though unable to meet the expenses of their children at the institution, are yet unwilling to go before the overseer of the poor and confess their poverty. This may not be a mere matter of pride. To make such confession may affect their commercial standing, as was the case with one deaf-mute, whose father claimed that, though he could not possibly spare the amount necessary for the education of his child away from home, yet it was possible for him to sustain his credit and make a living for himself and family, while if he should go before the overseer of the poor and make the declaration required to obtain a certificate to be sent to the department of public instruction, he could get no one to trust him and he would be obliged to suspend business.

" 2d. There are many others who are removed from the institution before they have had sufficient education to remedy the consequences of their great defect, because their parents feel unequal to the burden imposed upon them by the continued support of their children in the institution.

" 3d. It places it in the power of an overseer of the poor absolutely to prevent [as in a case cited by Dr. Peet] the education of a poor deaf-mute.

" 4th. The law, as it stands, makes an invidious distinction between rich and poor : against the former, because they cannot derive benefit from the taxes which they pay for the education of the deaf and dumb : against the latter, because they are officially recognized as destitute of means.

" 5th. It is inconsistent with the spirit of free education to all.

" 6th. It places the State of New York in a position to compare unfavorably, in this respect, with the States of Ohio, Indiana, Illinois, Michigan, and some others."

AGE OF ADMISSION.

While some difference of opinion is expressed in the various reports as to the best age for the admission of pupils, there is a general tendency to favor an earlier age than has been usual hitherto. Mr. Fay, of Ohio, argues in favor of six years of age; Mr. Hollister, of West Virginia, says eight. In the Arkansas Institution the required age is nine; in Texas and Minnesota it is ten; the principals of all these institutions urge the importance of sending pupils to school as soon as they reach the age allowed. Mr. MacIntire, of Indiana, says that from ten to twelve is the best age. Mr. Noyes, of Minnesota, would so far deviate from the usual rule as to admit under ten years of age deaf-mutes who are

without comfortable homes. We quote a part of Mr. Fay's remarks in favor of early admission :

"I have no doubt but that, on the whole, the welfare of the mutes of the State would be promoted by removing all limits of age, and allowing them to enter the institution as early as children are legally admissible to the public schools, and also to remain as long as their progress and conduct shall warrant. Practically, the permission to remain would make little or no difference, as mutes rarely care to remain for the time already allowed by law. The removal of the limit could do no harm.

"Opening the doors of the institution to mutes at the earliest school age, six, would not ordinarily result in their coming at that age. Such a result in many children would be an evil. It would, however, secure an earlier attendance than at present, and it would meet the urgent and increasing demand coming from our cities, where children develop rapidly, and where, from destitution or other imperative reasons, it is impossible often to withdraw them from the corrupting and frequently ruinous influence of street life. And in every part of the State the necessities of families and neighborhoods are occasionally equally urgent. This is always true of mute children growing up as a county charge.

"Children, favorably situated at home, and coming to school at ten, will learn more rapidly and will also need less personal care than those who come at a younger age. And it is also true that parents who are in circumstances to take this care of their mute children are not likely to desire to send them away from the parental roof at an earlier age. Where one parent would do it, five would, from mistaken tenderness, commit the opposite error, and send them to us for education at an age decidedly too old, not considering sufficiently that the youth is but beginning a process which should continue seven years at least. Hence it is that so many of our pupils find themselves men and women before they have half finished the stipulated course of study.

"In the Eastern States and the State of New York, pupils are received at six and eight years of age. In some other States they are received as early as seven, and in some institutions more recently established no especial limits are set, other than those regulating the admission of all children to the public schools. Our course of study is framed so as to correspond with the courses pursued by hearing youth in the public schools. Why not admit mutes, then, with no other restrictions as to age than exist in our accepted school system ?

"The slower progress for a while of the few sent at too early an age will be a less evil than the slow progress, the restless feelings, and the suspended education of the many sent to the institution at too advanced an age. The greater care requisite

in the case of younger grades of pupils and the diminishing value of the assistant labor of the older pupils, would be matters to be considered in the adjustment of the internal affairs of the household. The gain, substantial and sufficient, would be a better education at an earlier age. The humiliating necessity of pursuing elementary studies at an adult age, a situation keenly felt by our older pupils, would be exchanged for one agreeing more nearly with that of their brothers and sisters and mates in the schools at home."

Mr. Caruthers, of Arkansas, after speaking of the importance to young children of a mother's watchful care at home, says:

"The chief error, however, lies in the other direction. It is a deplorable fact that many parents, from an over-weening anxiety for the welfare of their children, made doubly dear to them by their infirmity, are unwilling to have them away from parental oversight, and cast among strangers, and so retain them at home until they are somewhat mature in years. This is a mistake that years of after training cannot rectify. Those who come here well advanced in years, at first usually keep pace with the younger pupils. They can commit to memory a vocabulary of words, and learn to write correctly the simpler forms, but seldom are able to master the intricacies of the language, and, after one or two years, are apt to fall behind in the race. The benefits of early training in the use of language become more apparent as the scholar advances, and at no time is it more noticeable than in the last years of the course. As we every day see, the period of childhood is peculiarly impressible, especially in the facility of acquiring language, so that little children become a marvel to older and wiser heads, who blunder along over a new language and wonder at their own stupidity.

"Another serious objection to parents retaining their children at home until they are well along in years is, that after one, two, or three years of schooling, when they have acquired only a smattering of language, they become impatient of the restraints of school life, and consent to forego the opportunity of completing their education to enter upon the active duties of life."

Mr. Hollister bases his argument for early admission upon the importance of a longer term of instruction than was formerly allowed, and the advantage of making the State institutions properly harmonize with the National College. He adds:

"Although all pupils may not be fit subjects for this higher education, yet no parent can be justified in unnecessarily keep-

ing his child from the institution until such an age that these higher advantages and preparations for usefulness are almost impracticable, and perhaps impossible."

In the New York Institution, where there are now 131 pupils between the ages of six and twelve, being supported by the counties from which they come, the necessity for a separation of these from the older pupils is keenly felt, and is warmly urged in the reports of the board of directors, the principal, and the superintendent. We quote a part of Dr. Peet's remarks upon this subject:

"The argument for this application of the principle of classification is the same that has led to the establishment of graded schools for hearing children, and is especially applicable to an institution like this, which is a home as well as a school. The more homogeneous any community, the more simple, economical, and effective the means by which it is united and controlled, and the greater the peace, quietness, and happiness that exist among its members.

"In no two points can our smaller and larger children be said to be homogeneous. The former need to be looked after in every respect; their supervision must be individual in its minuteness; they must be washed and dressed and tended with maternal care; the ailments to which they are liable must be anticipated and guarded against; the food must be purchased and prepared and served with special adaptation to their age and physical peculiarities; the hours of study and play must so alternate as never to produce fatigue of mind or body; they must be amused at the same time that they are instructed; even their religious services and instruction must be conducted in a different manner, as their attention cannot be compelled to connected remarks, nor can they follow a prayer that would properly express the sentiments and aspirations of their seniors.

"The older pupils, however, can be governed by general rules, and be kept in order by a general system of supervision. They can, in a great measure, take care of themselves and their property. They can be assembled together for discourses that would weary their juniors, and can be instructed and delighted by means that would be a source of discomfort to the latter. They can, moreover, come under a system, which, for *their* age, is adapted to produce the best results, viz., so dividing the time that they can have a sufficient number of continuous hours in the best part of the day for regular and systematic instruction and study, while other hours can be devoted continuously to the acquisition of a handicraft by which they may support themselves when they leave the institution. The system, in fact, that benefits them most is the system most injurious to the younger pupils.

"There are other considerations, however, which have probably a more important bearing on the subject than those which have already been adduced.

"And first, it requires greater care to protect the younger children from those *physical* injuries which are apt to result from association with older children. The larger boy, if circumstances favor impunity, even if not of a depraved disposition, may abuse a smaller one, especially if the latter has given him cause of annoyance.

"There is danger, too, in the second place, that when both classes of children are in the same school, the younger, when found capable of keeping up with the older ones in their studies, will be placed in the same school-room with them, and thus gain a premature *intellectual* development at the expense of their physical.

"But, third, it is in its *moral* aspect that the most serious objections to the association of the two classes of pupils are to be discovered. The younger boy is apt to imitate only that which is rough and unmannerly in the older one, without being able to adopt the more manly qualities which may form a partial compensation. The younger must be established in the *habit* of obedience and right conduct, while the older must be confirmed in *principle*, and trained to act from the higher motives.

"There is yet another point of view from which this whole subject may be regarded. I allude to the stimulus that is given to the mind by completely changing all its associations. If a child should enter the institution at the age of six, and remain till he is twenty, as is quite possible under existing laws, he would have a long, monotonous life in school, unrelieved by any change, while he would be less likely to be cured of habits that needed correction, or aroused from listlessness into which he might sink, than if, at some point in his long career, he started, as it were, *de novo*, under a different body of teachers and a different set of regulations, as well as amid new surroundings.

"The connection existing between the two schools, by reason of their being under the control of the same board of directors, would be such as to benefit both. The system of instruction pursued in the school for the younger children would be directly preparatory for the one intended for the older children, and the latter would be raised to a higher plane by having so much elementary work accomplished in advance."

We are informed that since this report was presented the change here recommended has been definitely determined upon. The younger children of the institution are to occupy the large mansion house that stands upon the grounds of the institution, leaving the principal buildings to the older and more advanced pupils.

TERM OF INSTRUCTION.

Many of the reports urge the necessity of a longer term of instruction than is usually received. In some institutions the legal limit is too short, being not more than five or six years; in others, where more time is allowed, the selfishness of relatives or the impatience of the pupils themselves has the effect to shorten the actual period of school life. Of the pupils who left the Pennsylvania Institution last year, the average term of instruction had been $4\frac{3}{4}$ years for the boys and $5\frac{1}{8}$ years for the girls; of those who left the Ohio Institution, less than $4\frac{1}{2}$ years; of those who left the Indiana Institution, not counting the graduates of the high class, a little more than $5\frac{1}{2}$ years. As already stated, early admission is the remedy proposed by several principals for the shortness of the period of instruction.

SIZE OF INSTITUTIONS.

Dr. Gillett, of Illinois, argues in favor of large institutions, while Mr. Foster, of Philadelphia, and Miss Rogers, of Northampton, oppose them. Dr. Gillett says:

“All practical instructors of the deaf and dumb, and especially all superintendents of large experience, agree that a good classification of pupils is of the first importance, and absolutely essential to successful effort on the part of both teachers and pupils. The range of mental capacity among deaf-mutes is so varied, including some who are but little removed above idiocy, and others naturally of as acute perception as the most favored and intelligent speaking persons, with all the intermediate grades, that a good classification cannot be obtained with a smaller number than two hundred. As the number of pupils increases above this, the classification can be more accurately perfected. Too much importance cannot be attached to this matter, as it involves the failure or success an institution attains. An expert only can adequately appreciate it, though the uninitiated will readily perceive the disadvantage arising from the association of bright and stupid pupils in the same recitations. Such association is discouraging to both. Those apt to learn are held back by the dull, while with the latter chagrin and discouragement follow their failure to cope with the former; self-respect, if the association is continued, is soon sacrificed, and effort virtually ceases. Hence arises the advantage of large institutions over small ones, and the universal policy of deaf and dumb institutions to increase the number of their pupils as

rapidly and as largely as possible. It is sometimes alleged that Americans have an inordinate fondness for material structures, and that their estimate of an institution is based more upon the amount of building material consumed in its walls than upon the principle of its internal organization or the measure of its practical utility. However it may be in other enterprises, such is not true in the case of the administrators of large institutions for the education of the deaf and dumb. The necessity for a large number of pupils to secure a well-regulated and perfectly-working deaf and dumb institution arises from the nature of the case. With a small number of deaf-mutes, a perfect establishment for their continued instruction can neither be organized nor administered upon an economical basis."

Dr. Gillett also quotes from his paper on the organization of an institution, read at the Seventh Convention, to show that 320 pupils is the proper number for an institution having a course of instruction of eight years.*

Mr. Foster says:

"It is undoubtedly true that in several respects—as the cost of ground for a site, cost of buildings, and of arrangements for lighting, heating, ventilating, etc.—the expenditure of money would be less for one large building than would be required for two smaller ones. It is probable, likewise, that a large number of pupils could be educated and supported at a less cost *per capita* than could a smaller number. But this is not quite certain, or is certain only to a limited extent. Because twenty pupils could be maintained at a less cost *per capita* than five, or fifty than twenty, it would not therefore certainly follow that the diminution in expense would go on *pro rata, ad infinitum*, as the number should increase. There must be a point where the diminution would stop—where the lowest cost point would be reached. Where is this point? Could (say) five hundred be supported for less *per pupil* than two hundred and fifty?

"The cheapest things are not always those which cost the least money, and a wise economy does not dictate the purchase of an article merely because the cost of it is small. In estimating the comparative advantages and disadvantages relatively of large and small institutions, there is something besides the smallest possible expenditure of money to be taken into consideration. The health and the best interests and welfare of the children are to be held as matters of paramount importance; and if the highest and best results are to be aimed at or desired, the question of the greater or less expenditure of money must sink to a subordinate place. Results are not invariably com-

* See *Annals*, vol. xv, p. 203; Proc. Seventh Conv., p. 152.

mensurate with the means employed. Unfavorable conditions may be the cause of failure even when the best means are used. In a community of deaf-mute children there are found all diversities of temper and disposition, and every variety of mental endowment—minds unfolding and unformed; and the object of their being brought together is that their powers may be developed, that right principles may be instilled into their minds, that they may be led to form correct habits, that their footsteps may be guided into the path of virtue, that they may obtain a knowledge of their accountability as moral agents, and learn the duties they owe to themselves, to their fellow-creatures, and to their God.

“The nurseryman who should give the same treatment indiscriminately to everything growing in his garden would certainly fail of success. He must not only dig and fertilize the soil, but must understand the diverse nature and habits of his plants, and adapt his mode of treatment to the requirements of each, placing those which prefer the shade and those which delight in the sunshine in appropriate situations—stimulating and encouraging growth in this and repressing it in that; affording support to one and applying the pruning-knife to another; training all symmetrically; keeping them clear of noxious insects and influences—the object kept constantly in view being to develop the foliage, blossoms, and fruit, and to make them not only useful, but things of beauty.

“An institution for the deaf and dumb is a garden, the plants in which are to be reared and trained to bring forth fruit unto eternal life; nay, it is a family, the children of which are to be brought up in the nurture and admonition of the Lord. It is not a camp of soldiers, where nothing is expected from those in authority but commands, and nothing is exacted of those in the ranks but obedience; nor is it a hotel full of guests, where every one pays his own way, and the services he receives are but purchased attentions. It is a family, and it should be the constant endeavor of those in charge to give to the community under its roof the family character. The nearer this can be approached, the nearer is the approximation to perfection. The superintendent or principal and matron stand, for the time being, in the delegated relation of parents to the children under their care, endowed with the duties, the authority, and the responsibility involved in that relation. While the special duties of the teachers is to furnish the minds of the pupils with knowledge, they can, and ought to, achieve much, both in and out of school, in the correction of evil habits, the development of character, and in general training; but there is besides this a peculiar work to be done, the importance of which can scarcely be over-estimated, which belongs especially to those at the head of the family, and which can be done by no others. Children constantly crave sympathy; they frequently need comfort and consolation in their trials and troubles, not less than reproof and admonition

for their errors; and such should be the intimacy of acquaintance and mutual friendship and confidence subsisting between them and those placed over them, that as much freedom may be felt in making known to them their griefs as would be felt in approaching their fathers and mothers, and as much certainty that the recital will not be received with coldness or indifference.

“This work of the principal and matron, even with a moderate number of children, is a difficult one, and as the difficulties must inevitably augment and multiply as the number is increased, it is obvious that the performance of it will at length become impossible. If the circle be too large, the influences emanating from the centre will not reach the circumference.”

Miss Rogers thinks an institution should not contain more than fifty or sixty boarding pupils, but would be in favor of having a hundred or more pupils in the school, provided they could be dispersed after school-hours. She speaks approvingly of the method she found in Weissenfels, Osnabrück, Rotterdam, and Berlin, where all or a part of the pupils board in private families, two or three in each.

“The institution selects the families, makes a contract with them, prescribing the mutual relations of the family and the children, listens to the complaints of both parties, and has the power to remove the children when the family is found unworthy of its trust.”

Miss Rogers says:

“This arrangement is the cheapest, and the least wearing to the director and teachers, gives the children a natural home life instead of institution life, and so lessens very decidedly the objections to large schools for deaf-mutes. That the same plan would be a success in this country is a matter of doubt, but it should be welcomed wherever practicable.”

Dr. Peet, of New York, remarks incidentally that 370 is a satisfactory number for an institution.

DORMITORY ARRANGEMENTS.

The Illinois Institution has had a year's experience of the plan mentioned in our review of the report last year* of dispensing with large dormitories and study-rooms for the female pupils, and placing them in small rooms, each con-

**Annals*, vol. xvii, p. 173.

taining but few persons. Dr. Gillett speaks enthusiastically of the success of the plan :

“In the inspiration of sentiments of personal refinement, of self-respect, of neatness, order, and self-reliance,” he says, “this new building, with its arrangements, becoming the habitation of human beings, did more in a month than years of dogmatical theorizing and admonition would accomplish. Indeed, it made a thorough and almost instantaneous change in the whole demeanor of that portion of the pupils.”

The system of large dormitories, which is still continued with the boys of the Illinois Institution as well as in most of the other institutions of the country, Dr. Gillett says, “more resembles the herding of stock than it does provision for the proper care of human beings elevated above the condition of the savage.” He adds :

“It cannot be successfully denied that the aggregation of twenty or thirty persons in a single apartment for sleeping, the change of apparel, ablutions, etc., with no facilities for privacy, are not only averse to, but totally subversive of, all sentiments of refinement, feelings of personal modesty, and self-respect. How must the labor of imparting refined culture to a class of persons who, like the deaf and dumb, are by their infirmity shut out from a knowledge of the conventionalities of life and the usages of polite society, be increased by such a gregarious system !”

THE USE OF SIGNS.

Dr. Peet, after speaking of the convenience of the sign-language as a means of communication among deaf-mutes, says :

“In the processes of instruction it is useful when principles are to be laid down and ideas conveyed to a large number at once ; but it is not at all indispensable in many or even most of the exercises of the school-room. During the past year all my experiments have been in the direction of dispensing with the use of signs. In the elementary steps the pupil has been led to attach words directly to objects and actions : and, in the more advanced classes, it has been sought to make language explain language, using minute and varied questions.

“I have not, however, lost sight of the great advantage, in the older classes, of using signs in the process of *translation* ; causing the pupil to translate into signs from an alphabetic description, to show that they understood its meaning : and from signs into words, to show that they could take a given idea.

perfectly clear to their minds, and express it in words. This latter is identical, in point of mental exercise, with describing an occurrence passing before their eyes; and the correction of compositions, written in this way, teaches them how to express themselves accurately.

"It is universally conceded that translating from a foreign language into our own, and *vice versa*, has an excellent effect upon the mind. To the deaf and dumb any written language, even that of their own country, is foreign."

ARTICULATION.

Articulation, of course, is discussed in many of the reports. In the Clarke Institution, the New York Institution for Improved Instruction, Whipple's Home School, and the Boston Day-School, articulation and lip-reading are made the principal means of instruction; in the New York Institution the same method is pursued with such pupils as are deemed capable of profiting by it, (rather more than one-tenth of the whole;) in the Hartford, Pennsylvania, Ohio, Indiana, Illinois, Missouri, Wisconsin, Michigan, Columbia, Maryland, and Montreal Institutions* articulation and lip-reading are taught by special teachers to such pupils as are found capable of acquiring it, while their general instruction is carried on at the same time by means of signs, the manual alphabet, and writing.

Professor Bell's method of "Visible Speech"† has been adopted in the Boston, Washington, Northampton, Hartford, and Illinois Institutions. In the Northampton school it had been on trial only a few months when the report was written; but Messrs. Sanborn and Dudley, who submitted the report of the corporation, say that its use so far has been exceedingly encouraging, and promises well for the future:

"Greater and better results," they declare, "have been attained with new pupils than were possible by the German method. On the part of advanced pupils, too, some defects in articulation have been corrected which imitation had failed to correct. We are unable to foresee any good reason why Mr. Bell's system should not be a success. It need not interfere

* We are not sure that this list is entirely correct.

† Described, in its application to the instruction of the deaf and dumb, in the *Annals*, vol. xvii, p. 1.

essentially with mental culture. Its very symbols are a lesson in physiology, and the application of those symbols necessitates intellectual activity. Here is mental culture at the outset. It is also highly auxiliary to lip-reading."

This method has been subjected to a peculiarly full and careful test at Hartford for about a year, (previous to the issue of the report.) While this length of time is of course not sufficient to be decisive of its advantages as compared with other methods, the experiment has been so conducted as to give much interest and value to the results obtained. It was begun by Mr. A. Graham Bell, who devoted five hours a day for two months to instructing the teachers and certain selected pupils. Since last September it has been continued by Mr. Clark and Miss Sweet, two of the teachers, who were especially trained by Mr. Bell for this work. They have had under their instruction about forty pupils, comprising both congenital and semi-mutes, the latter of more than average ability. "The greater part of the time given to this branch has been taken from the regular class instruction, and has been necessarily attended with some disadvantage to the pupils and inconvenience to the whole school." The pupils taught have been subdivided into classes, numbering from two to five persons each, which have received instruction for about half an hour daily. Miss Sweet says in regard to her classes:

"Instruction has been given to these pupils four hours daily for five days in the week. They have been put, except in two cases, into classes varying from two to four. Half an hour daily has been given to each class. In a class of four but little time can be given to each pupil, and of course the improvement will be very slow. Individual instruction is imperative in the outset, and more or less necessary during the whole course."

With respect to his pupils, Mr. Clark says:

"The work of the year with semi-mutes has aimed at correcting previous defects of voice, articulation, and pronunciation. Besides this there has been constant drill in difficult combinations of elements, reading language of one syllable, frequent lip-reading, and an attempt at inflection. In most cases, voice defects have been reached and some very much improved, while a few still need special attention. Habits of voice are doubtless as difficult to overcome as other habits.

“The class-work with congenital mutes has been primarily directed to obtaining correct articulation, and as much of it as possible. Much time has been given to obtaining control over the organs of speech.

“Considerable attention has been given to lip-reading, but this has been subordinated to what at present seemed more important—the correction of defects in semi-mutes, and obtaining a basis of words in the congenital. Most of the latter have in a week or two of special attention proved that they can read from the teacher’s lips most of the words learned. Some of those termed congenital have been carefully selected from pupils who, losing their hearing after birth, might be supposed to retain some idea of speech; the rest were from among the brightest congenital mutes.

“Experience has strengthened the opinion that the mind of the pupil and a habit of attention should be somewhat developed before attempting Visible Speech. We do not by this mean to imply that hopeful cases should not be taken up as soon as practicable.

“A word as to the value of Visible Speech. It seems to be the best and only true method of teaching articulation. Before it was introduced, nearly all our semi-mutes failed to give many of the simple elements, or gave them incorrectly, although several years of special and faithful labor had been received. Visible Speech has met these difficulties by showing the pupil just what to do.

“Where elements are yet imperfect in the case of semi or congenital mutes, it is due either to the force of previous habit or present lack of control over the tongue. Time will remedy these defects, many of which are but trifling.

“The question involved is, What proportion of congenital mutes can be benefited by it? Whatever difficulties we have to meet are due not to any imperfection in Visible Speech, but to the fact, primarily, that the child is deaf. Doubtless many such can be taught to speak; certainly many of those who come to us cannot. Of the former some will be found to have a special aptitude and make rapid progress, while others must have constant individual instruction, and after years of labor will probably fail to derive a benefit equivalent to the time and effort expended.”

Mr. Stone sums up the results, and expresses his opinion of their value as follows:

“The system of Visible Speech is a work of great ingenuity, and seems perfect as a scientific invention. In the hands of its author the organs of speech are controlled after the manner of a musical instrument; and the experiments show that the success which has been attained depends upon the system more than upon any particular teacher.

“I consider Visible Speech far superior to any method I have

known for teaching articulation; the hope of the deaf-mutes in this direction seems to rest upon it. Lip-reading is no more difficult by this method than by any other. Visible Speech possesses undoubted value for semi-mutes, and renders the instruction of those who have mastered the combinations of sounds before becoming deaf comparatively easy. The possibility of teaching selected congenital mutes to speak with mechanical correctness by this method has been abundantly proved, but experience shows it to be no light task.

“Teaching by Visible Speech is far more laborious and wearing than by signs, and there is great monotony until sufficient language has been acquired to make it the means of communicating ideas.

“Mr. Bell's statement, that ‘the full results of the introduction of the system cannot be known for a long time to come,’ is very true. The practical question, Can articulation be made a means of ready communication for the average pupil in our institutions? must wait during years of trial for its solution, but the experience of the past year, so far as it goes, tends toward the belief that it cannot.

“If it shall be found that the tongues which Providence has left dumb can be made to speak by human art, a sufficient recompense will be obtained for the arduous labor necessary.”

The Illinois Institution, after following for four years the plan of instructing a portion of its pupils by means of articulation, has abandoned or, rather, suspended that plan, and substituted therefor, as an experiment, Professor Bell's method of teaching articulation, the pupils meanwhile all being educated by the sign system. The results of the four years' experience with articulation as a means of instruction in the Illinois Institution is stated by Dr. Gillett as follows:

“Four years have now elapsed since the experiment was commenced, and we are able to arrive at some conclusions relative to the value of that method of instruction. The pupils selected were such as seemed to be a fair average of that portion of the deaf-mute community who are found in our institutions for their education. It is no disparagement to others to say that the teacher selected to conduct this experiment was one in capability, tact, and energy unsurpassed. The results of her labors have been highly creditable to herself, and satisfactory to the intelligent judgment of those who are qualified to judge of them. I feel warranted in saying that under the most favorable circumstances, with a teacher of much more than ordinary teaching ability, of indomitable energy and unyielding perseverance, and a small class of pupils specially apt and anxious to learn, in

some respects this method of instruction is superior to the sign method. But it is very difficult to secure all these favorable conditions. Even when secured, the vagueness of labial movements apart from sound leaves an uncertainty in the mind of the deaf-mute as to the correctness of the impression he has received from the communications made to him. He has neither the vividness of signs nor the conciseness of audible utterances. The intonation of voice which in spoken language and the facial expression which in the sign-language go so far toward intensifying and modifying the impressions received by the listener or observer are in this method largely absent. The consequence is that most pupils taught by this method gravitate unconsciously and in spite of all admonitions to the use of the sign-language, so that it may be said that they never can be induced to adopt articulate speech as their vernacular. Still there are some who amply repay the labor expended upon them, and meet with quite pleasing success both in lip-reading and vocal speech; and these, if retained after leaving the institution, as they may undoubtedly be, by care and practice, will be of vast convenience and advantage to them. In mental development the pupils who have been instructed by this method are in no respect behind those who have been taught by the sign method—indeed, in making a new classification for the present term, they have uniformly graded above those who had been taught by the intervention of signs, notwithstanding the additional labor they have performed in their study of lip-reading, labiology, and articulation. These experiences and results of our experiment (as yet partial) clearly indicate that it would be unwise to discard this method of instruction, unless a more convenient process of attaining the same end is found available. A practical difficulty has been encountered in our experience herein which was not anticipated at the outset, and which I believe has not yet been adverted to by any arguing this subject.

“It should be remembered that our effort has been not only to teach articulation and labiology, but to teach by this means, while at the same time another and by far the larger portion of our pupils were taught by the sign method. Thus two departments of the school, separate and distinct, have been growing up side by side, each demanding a classification for itself, a result that was doubling the number and expense of the corps of instruction. In the present financial condition of the institution this was becoming an embarrassing circumstance, and my mind was for a time quite anxiously perplexed to discover a remedy. Fortunately there has of late been introduced to the literary public a system of universal alphabetics, which, comprising a few simple elements represented by pictorial symbols, are capable in themselves and their combinations of representing any and all possible positions and movements of the organs of speech in the human species.” [Here Dr. Gillett gives a brief description of the nature and uses of Visible Speech. He continues:]

“With the opening of the present term we suspended the method of instruction for four years pursued, and introduced Visible Speech instead, so that our articulation classes now are classes in articulation only, Visible Speech being the means used to teach articulation. This has enabled us to merge the pupils of our former articulation classes into those taught by signs, restored the school to the condition of a single classification, and enabled us to dispense with the services of two teachers. I trust that our expectations in making this change may not be disappointed, but should they be we shall have lost nothing, and can return to the method for the time suspended whenever prudence may so direct.”

In the two institutions in New York city, on the contrary, the principals, after a careful investigation of the Bell method in its practical working—Dr. Peet, accompanied by Mr. Engelsman, the professor of articulation in the New York Institution, at the Boston, Hartford, and Northampton Institutions, and Mr. Rising at the Northampton Institution only—recommend that no change be made at present in the mode of teaching articulation in their own schools. Dr. Peet says:

“I cannot recommend the adoption of the Bell system in our institution until I see further results where it is now on trial. The remarkable success of Professor Engelsman in teaching articulation and lip-reading would indicate that *his* method should not be lightly abandoned. Possibly Mr. Bell’s elocutionary exercises might be added with profit; but these are entirely separate and distinct from the system of Visible Speech. It is yet to be seen how much Mr. Bell can do toward lip-reading, which is also entirely distinct from this system. Professor Engelsman contends that the system is not consistent with this acquisition, which is very important; more important, in fact, than speech.

“It is a most fortunate circumstance that this system is having such a fair trial in the three schools named, as we shall be enabled to decide absolutely on its merits, as compared with our own, without incurring expense which, if it prove inferior, would be useless, while if it turns out to be the best method, the expense of adopting it will be a matter of minor consideration.”

Mr. Rising also mentions the fact that the Bell system is being tried thoroughly elsewhere as a reason why it should not yet be introduced into his own institution, and adds:

“I am not yet satisfied how much of success is due to that peculiar system, and how much is due to the enthusiastic and

persistent labors of its advocates concentrated upon a few bright mutes, and whether, therefore, the same zeal would not produce equally good results without Visible Speech. Better results could be obtained in this or in any institution by giving a teacher six pupils rather than twelve, and unlimited time for their education. If Mr. Bell can demonstrate that as large classes can be as rapidly and economically educated by his system, and possessing better voices, his system will be adopted in all institutions. But, as is feared, if more time be required and greatly increased expense, it is questionable whether it would be the duty of the State to secure such advantages at the price demanded."

Dr. Blumenthal, president of the New York Institution for Improved Instruction, maintains that—

"The two systems of instruction, namely, by articulation, or by the sign language and manual alphabet, cannot, with advantage, be combined in the same institution; and the time is fast approaching when those whom mental incapacity or other physical defects prevent from being taught articulation, must form a distinct class, having their own institutions; while the articulating pupils and those capable of being taught speech must have separate and distinct educational establishments."

The Clarke Institution takes the same ground. Messrs. Sanborn and Dudley say:

"It has never been maintained by the managers of the Clarke Institution that the method of instruction adopted here is equally applicable to all deaf-mutes. Our desire and purpose is to find out the limits of the class for which it is the best method, and to restrict our efforts to this class, since we cannot undertake, in so small a school, the education of all deaf-mutes who may apply for admission. When our school list is full, as in all probability it soon will be, it will be necessary to decline receiving pupils, and it will be our intention in choosing from the applicants presenting themselves to take those who can be equally well or better taught here than elsewhere, and to discharge or transfer to other schools, if desired, those who can better be instructed elsewhere, as soon as experience has shown which they are. Such a course is best for the pupils and best for the efficiency of the school; nor does it imply that any invidious or unreasonable selection will be made among the candidates presenting themselves, or the pupils already in school."

Mr. McCoy, of the Virginia Institution, is also

"Satisfied that instruction in articulation cannot with much

success be carried on conjointly with the other system, and that it is mere waste of time to keep a pupil four hours a day in the recitation room, where the sign language is the medium of instruction, and then undertake to teach him articulation for the other hour or two. He loses just that much of the regular course, and has too little time for practice and profit in the other. Outside of the school-room he will never practise articulation, since he can converse with his associates only by signs. If, then, he is to be taught articulation, he must be kept at that alone, and have nothing to do with signs." •

Mr. Kerr of Missouri and Mr. Widd of Montreal recommend the adoption of the Bell system, as used in the Hartford, Washington, and Illinois Institutions.

The report of the examining committee of the New York Institution, which was submitted by the late Dr. H. P. Peet, speaks rather disparagingly of the intellectual attainments of some of the pupils who have been instructed by means of articulation. He says that the committee saw one or two bright examples of congenital deaf-mutes who succeeded well in articulation, and that many of the more intelligent pupils (most of whom are semi-mutes) "read on the lips with surprising facility, as well when the teacher merely made the motions of the vocal organs without speaking as when actually speaking aloud, and some of them spoke in a manner so natural and intelligible that the auditor would hardly suspect that they were deaf;" but adds:

"After witnessing the splendid examples of progress in knowledge and literature presented by some semi-mutes, it was rather of a disappointment to the committee to find that quite a considerable proportion of the articulation pupils were dull and slow in their studies. While they read on the lips of their teacher with tolerable facility and spoke more or less distinctly, it may be doubted if these dull ones will find their attainments in these respects of much value, except with those daily accustomed to converse with them."

Dr. I. L. Peet maintains that articulation is "not a system of instruction." He says:

"Many have held that articulation was a system of instructing the deaf and dumb, distinct from the method employed by those who admit the use of signs. The experience we have had with it does not lead me to such a conclusion.

"Articulation is simply a means of expression. The action of the vocal organs produces on the mind of the deaf-mute no effect at all different from that felt when the hand is used in writing or spelling. The motions of the lips and those of the fingers are to him alike purely arbitrary. Articulation is making signs with the lips and other vocal organs; and reading the lips is, with him, nothing more than attaching a meaning to visible signs. The theory that speech gives rise to ideas in the mind of a deaf-mute different from those produced by writing or the manual alphabet is an old heresy; but, like all heresies, it has resulted in some good. It has been shown that it is possible to make some deaf-mutes speak and read on the lips; and this is a valuable acquisition, when its attainment does not consume too much time which might profitably be otherwise employed."

The report of the Clarke Institution contains in an appendix a very interesting account of the principal's visit to European institutions in 1871-'2. Miss Rogers remained five months in Vienna, making daily visits to the private school of Mr. Leffeld and the Jewish institution under the direction of Mr. Deutsch. She afterwards spent a month in Italy, and then travelled through Germany, Holland, Belgium, and England, visiting in all twenty-two institutions for deaf-mutes, one each in Italy, Switzerland, Holland, and Belgium, the others in Austria, Germany, and England. We quote the most important parts of her report upon articulation and the methods of instruction in general:

"Of the twenty-two deaf-mute institutions visited, fifteen employ the German and seven the French system. No one of the fifteen uses the manual alphabet, the Berlin institution having now relinquished it. Seven of these use but few signs; two or three employ little more than a few natural signs in early instruction. In the other institutions pursuing this system there seems to be little uniformity in the use of signs, some teachers using a great many, while others in the same school consider them a hindrance and make very little use of them.

"I understand that in the German institutions signs quite generally accompany the religious services. I tried to attend these services at different institutions that I might see for myself how they were conducted, but greatly to my disappointment, after repeated efforts and failures, I witnessed only two. The first was conducted by signs, the speaker talking at the same time, but without voice. The other was conducted entirely through speech. The gospel and subject of the sermon were those appointed for the day. The lesson was from John xvi, 5-16, which includes those passages explaining the office

of the Holy Spirit. The director, as he proceeded, occasionally asked questions, and the answers given showed how well the children comprehended his remarks.

"I was told that the use of signs is not a growing tendency, and that much more attention is now given to articulation in some of the old institutions than formerly. All recitations are conducted through speaking and lip-reading, signs being considered supplementary to them.*

"I know of no school in Germany using the French system. In three of the seven schools previously mentioned as using that system articulation is taught as an accomplishment, or is considered an end rather than a means of education. In Rome, by order of the Minister of Public Instruction, it is taught to all the pupils, and in a private school in London to a part only. In Bruges, the only institution in Belgium using the French system, articulation is attempted to some extent with all, but is continued only with those showing some special facility for acquiring it. The other institutions in Belgium have within a few years adopted the German system.

"In the four remaining schools, which are English, I judge little more is done in the way of articulation than trying to perpetuate the speech of their semi-mutes, unless it be at the institution at Old Kent Road, London, where articulation is practised to some extent with all the pupils the first year, the children learning to speak their names and answer some simple questions.

"In the schools where the German system was employed, two or three different methods of instruction prevailed in the class of beginners. In some schools all the elementary sounds, beginning with the vowels, and all imaginable combinations of these, were taught before giving the child words. These combinations were not written, but the letters composing them were pointed out by the teacher, and the child, arranging them men-

* In her desire to do justice to Mr. Hirsch, of Rotterdam, by relieving him from "the absurd position" of saying that he was able to dispense with the language of signs in the instruction of deaf-mutes, (as stated in President Gallaudet's report of his visit to European institutions,) Miss Rogers, we think, does injustice to Dr. Gallaudet. She implies that the latter, in quoting from a published address by Mr. Hirsch, committed an error of translation by leaving out before the word "signs" an adjective signifying *conventional* or *arbitrary*. It would appear, however, from Mr. Hirsch's letter on the subject to Dr. Gallaudet that not Dr. Gallaudet but Mr. Hirsch himself, or his printer, was responsible for the error, the exact words of the address being "ni l'alphabet palpable, ni la langue des signes ne peuvent s'y allier." (See the eleventh report of the Columbia Institution, page 57.) Dr. Gallaudet gave Mr. Hirsch's explanation of the misunderstanding in his paper read before the Washington Conference of Principals.—ED. ANNALS.

tally, spoke them. About six weeks were given to this drill, after which, for some time, an hour daily was spent in articulating elementary sounds and combinations; an hour or two in reading these from the lips and writing them, while the rest of the day was given to development by means of articulation, lip-reading, and writing. Some teachers gave more than six weeks to the elementary drill before giving lessons in language, and were compensated for it by increased facility in the use of the vocal organs.

"In other schools a few vowel sounds, and two or three consonants with their combinations, were taught, and then some simple words formed of these, with their meaning, were given the child. Then followed other elementary sounds, combinations, and words. A picture of the object whose name had just been taught was then fastened into a blank book, and the name written beside it. At the Rotterdam school, Mr. Hirsch, the director, had arranged and printed, in script hand, elementary sounds, combinations, and words, with pictures illustrating the meaning of the words.

"Still a third method was to teach some of the consonants first, as h, p, t, k, then two or three vowels, combine these, and then use three letters in combination, as pap, tit, kak. After many combinations a few words with meaning were given. Then followed more consonants, vowels, combinations, and words.

"Any difference in the results attained by those using these different methods seem due to the zeal and tact of the individual teacher, rather than to anything else. The best system in the world, with an incompetent teacher, cannot produce the results obtained by an inferior system with a teacher whose tact can supply its defects.

"Were we not at this time using Mr. Bell's system of "Visible Speech," I should modify our previous method of giving the earliest instruction in articulation, and should spend more time than formerly on elementary drill before giving words.

"To institute a just comparison between the schools on the Continent and those in America seems to me almost impossible. What American visiting those schools knows the language there taught as he knows his native tongue? He may understand others and make himself understood, but does he know the peculiarities of the language, its nice shades of meaning and its construction, nearly as well as he knows his own? How, then, can he compare the attainments of pupils using the two languages?

"On careful inquiry as to whether children improved or lost in articulation after leaving school, no instance was given of a child's wholly losing its speech. Some said children spoke more, though not as well, but read the lips better. Others said it depended upon how they were situated after leaving school. Again, others said decidedly that they improved both in speaking and lip-reading. Mr. Hirsch, of Rotterdam, bore this testi-

mony, that of the one hundred and sixteen pupils who had left his institution, one hundred spoke more and better, understood language and read from the lips better after leaving school than at the time of leaving. The remaining sixteen, through sickness, death, or weak mindedness, had failed to reach that result.

"A private school of ten pupils in London, that of Miss Hull in Kensington West, gave me great pleasure. She employs what is called the French system, but I have never before seen it used with so few signs. They are used only in the early instruction in explanation of words and phrases, but never of whole sentences, and when a child knows a word its sign is no longer used with him. Her use of signs is hardly objectionable, for she really makes them only a stepping stone to language, a thing which many teachers of the French system desire and claim to do, but an instance of which I have never before met. All explanations are given to the first class, consisting of five pupils, either by the manual alphabet or by writing. The intellectual development of her pupils, and their use of language, reflected great credit upon her teaching. Three of her pupils have been taught articulation as an accomplishment, two of whom almost invariably speak when addressing her.

"The other English schools which I visited, and which I am told are among the best in the country, did not meet my expectations. I had supposed they were fully equal to those in America, but judging from what I saw during my visits there, they did not compare favorably, particularly in the children's use of language. I should think in years past they may have had a better class of pupils, who remained longer and attained better results.

"Their great want seems to be efficient teachers. They have some earnest, unselfish workers, but not many. One institution lacked one teacher, and two institutions two teachers each. One director said to me, 'The system upon which our institution is supported puts it beyond our power to obtain and retain efficient teachers.' The institutions are dependent upon yearly subscriptions, donations, and legacies. These bring an uncertain income, and the institutions pay too small salaries to procure the services of young men of ability, unless actuated by other than mercenary motives."

In reply to the objection often made to the German system, that though it may be well adapted to the semi-deaf or semi-mute, it is so only in exceptional and rare cases to the congenitally deaf, Miss Rogers quotes the marks given the first one hundred scholars in the institution at Osnabrück for development, understanding of language, and lip-reading, showing that the congenitally deaf stood fairly well with the semi-mute and semi-deaf in these respects.

MECHANICAL INSTRUCTION.

The importance of mechanical instruction for the pupils while receiving their school education is spoken of in many of the reports. The practical benefits resulting from this instruction are stated by Mr. Foster, of Philadelphia, as follows :

“Although it cannot be reasonably expected that the boys engaged in working at a trade for but two or three hours a day, five days in a week, for only three or four years, will in that time become skilled workmen, yet it may be asserted with truth that nearly all do acquire a facility in the use of tools which will stand them in good stead in their after life, and that many of them leave the institution with sufficient knowledge of their trades to enable them at once, or after a very short apprenticeship, to support themselves. A considerable number who learn other trades after leaving here find that the time spent in work in our shops has been by no means time thrown away. They have learned how to use their hands : how to handle tools, and have acquired facility in their use : have learned how to make something ; and can much more readily and easily turn their hand to something else than they could otherwise have done. A boy who had worked at shoemaking while here, in about a year after leaving was earning a comfortable living as a repairer of clocks and watches.”

In the American Asylum we are very glad to see that in addition to the ordinary classes in drawing, “a number of boys from the cabinet-shops have been taught the elements of perspective and free-hand drawing with special reference to their trade, and can make a practical use of their knowledge in it.” There is no reason why deaf-mutes should not excel in work of this kind, and the brilliant results which have followed its introduction into the common schools of Massachusetts certainly justify the devotion of much more time and money to this branch of instruction than has been usual in our institutions.

In the Indiana and Illinois Institutions, and perhaps in others, the expenses of the workshops, sewing-rooms, and gardens, in which the trades are taught, are fully met, or more than met, by the proceeds from the sale of articles manufactured, and vegetables, fruits, and flowers raised. In most institutions, while the mechanical instruction given is

not thus made self sustaining or pecuniarily profitable, the advantages conferred are regarded as richly repaying the slight outlay involved.

Miss Rogers, of Northampton, speaks with approval of the system which she found practised in the Rotterdam Institution of apprenticing the boys to trades in the city during the last two or three years of the course. The boys devote their mornings to the school, and their afternoons to the trades. Miss Rogers says:

"This arrangement seems much more satisfactory than that which obtains generally in Europe of learning the trade after leaving school, or than that found in America, of learning it at the institution, as the boys are not forced to leave school so young, and have the opportunity of mingling with hearing people while learning their trade: a point gained, since the less closely persons possessing the same peculiarities or deficiencies are associated, the better."

MICHIGAN CONFERENCE OF PRINCIPALS.

The report of the Michigan Institution, as already mentioned, contains in an appendix the stenographic report of the Conference of Principals held at Flint, August 14 and 15, 1872. This is a document of more than a hundred printed pages, and very interesting and profitable reading for all who are concerned in the education of the deaf and dumb. We do not quote from it, because the report itself being in the hands of most of our readers, and obtainable by others, is as likely to be bound and preserved as the *Annals* is. Persons wishing to obtain copies should apply to Mr. Egbert L. Bangs, Principal of the Institution for the Deaf and Dumb and the Blind, Flint, Michigan.

“DEAF-MUTE” CONVENTIONS, ASSOCIATIONS, AND NEWSPAPERS.

BY EDWARD M. GALLAUDET, PH. D., LL. D., WASHINGTON.

“Our present system of deaf-mute instruction tends to make the deaf deafer and the dumb more dumb.”

It is a very old adage that advises men to profit by the wisdom of their opponents. The sentiment quoted above will be remembered by many of the readers of the *Annals* as having been advanced by a prominent and wholesale critic of the American system of deaf-mute instruction in the course of the memorable controversy in Massachusetts, which resulted in securing the aid of the State for an institution founded on a method designed to make the dumb actually less dumb and the deaf figuratively less deaf than they were by nature.

It is not the purpose of this article to discuss the main question involved in our text, which may, however, be done on another occasion; but to consider some existing deaf-mute “institutions” other than those designed to provide for the education of children and youth, which are the outgrowth of these, and to discover, if possible, whether they involve the tendency suggested of intensifying the peculiar features of deaf-mutism in those who are suffering from this disability.

It is the utterance of what has become a platitude, through its repetition in hundreds of annual reports, to say that the object of deaf-mute education is to place its subjects in advantageous communication with their hearing fellow-men, or, in other words, to break down, as far as circumstances will permit, the barriers raised by their physical infirmities in the way of their free intercourse with their race and its Maker.

And so exclusively is this the end of their training in special schools that we may assume it to be as small a part of their education to fit them for intercourse with other deaf-mutes as it is of general education to teach elocution and music. Indeed, so considerably does the association of

deaf-mutes together increase the difficulty of attaining the main end of their instruction, that we regard their acquisition of that means of communication with each other known as the language of signs as one of the necessary evils incident to a system that may be shown to be on the whole by far the most advantageous that has as yet been devised for the great mass of deaf-mutes.

We hesitate somewhat to state, lest our spirit in uttering such an opinion should be misunderstood, what we are constrained to accept as truth with regard to the intercourse of deaf-mutes with each other, that it exerts *on the whole* an injurious effect on their intellectual development, and hence ought to be discouraged by themselves and their friends as much as possible.

Everything that serves to draw class lines about them, to intensify their feeling that they are members of society with interests apart from the mass, to foster the idea that even after leaving school they still, though scattered in widely-separated places, form a “community,” with its leaders and rulers, its associations and organs, and its channels of communication, does undoubtedly tend to make them deafer and more dumb.

So irrational is it, and so really unkind, to seek to teach deaf-mutes to regard themselves as a class in the community, that we have long been unable to contemplate without a shudder of commiseration the use of the word deaf or dumb in sign-prayer, whether in schools or religious services for adults.

Why should the children of an institution or the adult graduates thereof have their sentiments of charity and humanity narrowed and warped by being taught daily to pray for “all deaf and dumb schools and all deaf and dumb?” We are not sure that any true interest would be sacrificed if the easily made and often used sign for “deaf-mute” were abolished by legislative enactment, and the use of the *word* never allowed save as given by the manual alphabet, which which would be almost tantamount to its suppression among deaf-mutes themselves.

But we are trespassing on what should properly be made the subject of a separate article.

We have undertaken to discuss the utility of conventions and associations of deaf-mutes as such, and of newspapers published in their interest.

So far as these go to strengthen class feeling among those who sustain them, we do not hesitate to pronounce them hurtful, and hence undesirable.

Conventions which take the shape of alumni meetings, held at stated periods under the ægis of *Alma Mater* and within her walls, may be so far divested of their *deaf-mute* character as to escape our criticism; but we would have the word *deaf-mute* carefully excluded from the constitutions of these associations, except in cases where the name of the school must be inserted. And we would have the members of such associations look upon themselves not as deaf-mutes, but simply as graduates of a school where they were led by force of circumstances to pursue their education together.

And even these alumni meetings will not be without their evils, since by bringing the sexes together they induce intermarriage among deaf-mutes, which we are constrained to deprecate *in toto*, while we would permit the deaf to marry hearing persons with no other let or hindrance than those existing in the community at large.

In these days of association for almost every conceivable purpose, we cannot wonder that the idea should be seized upon by a body of persons who, it must be confessed, find it not easy to participate in the benefits of many of the unions of existing society, and the tendency, if not the direct result, of whose early education has been to isolate them from their fellows, and to develop clannishness in strong measure. We would speak with all gentleness and consideration of those who have innocently fallen into the error we are endeavoring to point out, and accord due respect to what we believe to be their good intentions in the matter.

At the same time we may be allowed to doubt whether, as they have been hitherto organized and carried forward,

these organizations of deaf-mutes have not wrought serious harm in that they have led their members to stand aloof from other society, to live in solitude more or less complete through the year, reserving their social energies for the one grand convention or reception when they might mingle freely with their "clan."

As to the establishment of reading-rooms and libraries outside of educational institutions, we are free to characterize them as superfluous in our country, where every large town and city has its public libraries and young men's institutes, with which deaf-mutes may freely connect themselves, and whose alcoves and tables will furnish a much greater variety of reading matter than can be offered by any society formed in the interest of a class that comprises only a two-thousandth part of the community.

There is one important exception which must be made in treating of our subject, and in reference to which we fancy there will be little difference of opinion. We refer to religious services for the deaf and dumb in communities where any considerable number of them reside. Here the obstacles in the way of their participating in ordinary religious exercises are so great that every consideration for their welfare points toward special services in their behalf.

But, in the organization of societies for the support of these services, and in the prosecution of what may be termed parochial labors among them, great care needs to be taken lest the idea we are combatting make itself felt, to the detriment of those sought to be benefited. There is danger in such cases that the mute will step from the motherly care of the school to the fatherly care of the parish, and thus fail to secure that self-dependence which is the pride of all true men and women, and against the exercise of which deafness forms no insurmountable barrier.

The deaf-mute newspaper is an institution of very uncertain perpetuity, if the evidence of the past few years is to be taken as an index of what is to be expected. And in passing criticism on this form of association for the benefit of deaf-mutes, we would disclaim any intention of under-

valuing the motives or underrating the ability of many worthy and self-denying men, who have given freely of their time and substance in support of the various publication efforts in this direction which have passed into history or are now existing.

We bear willing witness to the purity and sincerity of their motives, and the zeal and ability with which in certain instances they have prosecuted their more than gratuitous labors.

We have been led, however, to question very seriously how far the interests of the deaf and dumb as a class are to be advanced by any special publications, save such as are purely professional, and devoted to the discussion of systems and processes for their instruction and improvement.

As individuals, the deaf and dumb, if they have made that progress at school which a course of from five to ten years' judicious instruction implies, certainly ought to find reading matter in abundance among all the vast variety of publications that cater to the tastes and mental stature of every stage of life capable of reading at all. And it would be an easy task for the principal of an institution to name to the members of each graduating class certain inexpensive journals to which they might become subscribers, and the constant reading of which might serve in great measure to keep them in pleasant and interested intercourse, not with their "clan" indeed, but—far better—with their race and the world, which is as truly theirs as it could be if they were not deaf.

We aver it to be a positive disadvantage to deaf-mutes to rely for their mental aliment on a weekly or monthly dish of deaf-mute gossip, deaf-mute news, deaf-mute stories, and deaf-mute poetry, with now and then a deaf-mute controversy, a deaf-mute scandal, proceedings of a deaf-mute convention, a deaf-mute commencement, deaf-mute base-ball matches, weddings, funerals, and even deaf-mute births; all weakened to the too low average capacity of the educated (?) deaf-mute, so that he can enjoy without labor the mental attitude of an animate sieve, which has just enough

intellectual consciousness to be able to delight in the pleasure of being trickled through.

And if the average deaf-mute can obtain such food for his mind he will prefer it to anything stronger or better. For it is with current literature among the masses much as it is with current money: the least valuable monopolizes the circulation to the exclusion of what is or represents pure coin, few being willing to pay the premium of effort to secure the more valuable when they can with little or no labor satisfy their mental stomachs with such dinners as a debased currency may afford.

We would perhaps be willing to allow that a periodical *might* be published in the interest of deaf-mutes which, *if they could be made to take it*, would benefit them; but it would be different in matter and arrangement from any we have yet seen, and we entertain grave doubts, indeed we are convinced, that if an ideal "deaf-mute" paper could be produced its subscription list would be too attenuated to insure its existence. To make a suggestion which would at least have the merit of being possible of accomplishment, if the *Annals* were to become a monthly, and were to be made one-half larger than it now is; were embellished with illustrations, and made to include a department arranged in the interest of deaf-mutes outside of the discussion of educational matters, which, however, should still occupy at least half the magazine—this department to be kept rigidly clear of gossip and personalities—we believe a journal would be in existence such as the deaf and dumb might profitably read, and even study, and which very many of them would enjoy.

And above all, if in this publication there were frequent and judicious notices of such books and papers as might interest the average deaf-mute, tempting him to leave his "clan" and roam in the fields of general literature, we believe it might perform a most valuable office in the great work of raising the average of intellectual culture in the deaf-mute community—a term we make use of only to condemn—above its present lamentably-low standard.

If this brief article, in which we do not wish to be understood as placing conventions and associations of deaf-mutes and papers published for their benefit under a perpetual ban, shall serve to call attention to some of the faults of existing associations, and lead to greater thoughtfulness on the part of those who have, with the best intentions, countenanced or supported enterprises calculated to intensify the class feeling among deaf-mutes, and so withdraw them more and more from association with their hearing fellow-men, thus practically making them deafer and more dumb, we shall not have failed altogether of accomplishing the object at which we have been aiming.

MISCELLANEOUS.

BY THE EDITOR.

Curious Statistics.—A writer in the German *Organ* for April, 1873, mentions some curious statistics of the deaf and dumb which have been going the rounds of the European newspapers. These statistics have reference to religious persuasions, and they state that the proportion of deaf-mutes among the Jews of Paris is one in 673; among the Protestants, one in 2,173; and among the Catholics, one in 3,179, from which it would appear that the Jews are more than three times as liable to this affliction as the Catholics, while the Protestants are much more exempt from it than the adherents of either of the other religions. In Nassau also the Jews have the most deaf-mutes; but the relative numbers of Protestants and Catholics are reversed. Among the Protestants one in 2,638 is deaf and dumb; among the Catholics one in 1,869. Some one suggests that these differences are due to more or less intermarriage of relatives, but this explanation is merely substituting one mystery for another: why should there be more intermarriages among Protestants in one locality and among Catholics in another? The writer in the *Organ* comments upon the statistics as follows:

“Deafness is not recognized at birth. It becomes unmistak-

bly evident only when the infant arrives at an age when he ought to show comprehension of what is said to him. But the statistics referred to are not collected until the child is old enough to be sent to school. It is obvious that the care and maintenance of a deaf-mute until he arrives at the age for school is a very heavy burden for poor parents. Among the poorest classes, where the mothers go out to work and the children are left at home uncared for, the deaf-mute rarely survives the years of early childhood: he dies without being counted among the deaf-mutes. Only the better situated families contribute deaf-mutes to the statistical tables. Among the lower classes the numbers born deaf and dumb increase the death statistics without affecting the deaf-mute statistics. Now, with the Jews, poverty is comparatively rare. The mothers seldom go out to work while children need their care. Consequently a large number of deaf-mutes reach the age when they are counted in the statistics, and the Jews appear to be most subject to deafness. With Protestants and Catholics circumstances vary according to the country. In France, where the poor people are mostly Catholics and the Protestants are comparatively well off, more Catholic deaf-mute children die at an early age, so that this religion appears in subsequent statistics to be favored. In some parts of Germany the reverse is true. In Nassau the Protestants preponderate among the lower classes, and the deaf-mute children go to their graves before the statistics are taken: here, consequently, Protestantism seems to be less visited with the calamity of deafness. The folly of all these statistics consists in their being based upon religious distinctions instead of the profound social differences upon which they really depend."

A Plagiarism.—In the last number of the *Annals* mention was made of an article entitled "The Dumb Speak," published in the *Canadian Monthly* for December, 1872. Our attention is called by *Le Progrès*, a Belgian journal of education, to the fact that this article was almost wholly drawn from the work of the Canon de Haerne, "De l'enseignement spécial des sourds-muets, considéré, dans les méthodes principales, d'après la tradition et le progrès." Upon comparing the article with the book we find the statement of *Le Progrès* to be correct. The Canadian writer's history of deaf-mute instruction, his curious facts, his arguments and deductions, his learned quotations, indeed everything in the article except the eulogy of the Montreal Catholic Institution and a slight reference to the Clarke Institution, are all to be found in Canon de Haerne's admirable treatise.

His ignorance of the advocacy by President Gallaudet and others of the "combined method" in this country, his inaccurate statements that articulation is not taught in New York nor anywhere else on the American continent except at Montreal and Northampton, and that pupils are not admitted to the New York Institution under twelve years of age, are explained by the fact that Mgr. de Haerne's book, from which he derives his information, was written eight years ago. In some parts of the article the author (?) has abridged and otherwise changed the language of the treatise; in others he has translated it word for word. The plagiarism is the more discreditable from the fact that no mention whatever is made of the Canon de Haerne, though the latter was one of the earliest, as he has always been of the ablest, advocates of the "combined method" extolled in the article.

The Vienna Exposition.—We are happy to announce that President Gallaudet has received the appointment of honorary commissioner to the Vienna Exposition from the President of the United States, with special reference to the education of the deaf and dumb. It is pleasant to think that at least one department of the American commission will be creditably and honorably represented. We shall hope to receive from Dr. Gallaudet a full account of all matters relating to deaf-mute instruction at the Exposition.

Mr. Schilling, an instructor in the Wisconsin Institution, has an honorary commission to the Exposition from the governor of his State, and we hope that he too will report upon what he sees and hears at the Exposition, as well as upon the German institutions for the deaf and dumb, several of which he expects to visit. German is Mr. Schilling's native tongue—a fact which gives him a decided advantage over most of the American investigators of the institutions of that country.

No convention of instructors of the deaf and dumb, we think, will be held in connection with the Exposition. Such a gathering has been proposed, but no active measures have been taken toward its accomplishment.

The Next Convention.—As has already been made known by the circular of Dr. Peet to those chiefly interested, the executive committee have determined, in accordance with the votes of a large majority of the American instructors of the deaf and dumb, to postpone the holding of the next convention until 1874, the time and place to be determined at a meeting of the committee to be held next October. The following topics for discussion at the convention are suggested by the committee :

“1st. As to the best means of securing to congenital deaf-mutes of average capacity an understanding and an idiomatic use of the English language.

“2d. As to the best means of teaching articulation and reading on the lips.

“3d. As to the limits of the number that should be taught in one class by a single teacher.

“4th. As to the effect upon the character and reputation of deaf-mutes of assembling together in conventions, etc., after they have been educated.

“5th. A system of word-signs calculated to be a substitute for writing and spelling in the expression of the English language.

“6th. The necessity of illustrative apparatus in the education of the deaf and dumb.

“7th. The extent of the responsibility of the teacher in regard to the moral and religious character of his pupils.

“8th. As to whether the instruction of the deaf and dumb is entitled to rank as a profession, and the rights and responsibilities which are consequent upon a decision of this question.

“9th. As to the limits to success in the education of the mass of deaf-mutes growing out of the fact of early or congenital deafness.

“10th. As to the advisability of separate institutions for the deaf and dumb, and the blind.

“11th. Sign-writing and symbolic representation.

“12th. Special efforts to furnish deaf-mutes with books and periodicals adapted to their needs.

“13th. The bibliography of deaf-mute education.”

The committee request that additional topics for discussion be sent to Dr. Peet, who will transmit them to the principals of the institutions; and they recommend that during the coming year these various subjects be discussed in meetings of the teachers connected with the different institutions, with a view to comparison of opinions and results at the convention.

The College Commencement.—The Commencement of the National Deaf-Mute College was held Wednesday, June 25. Three students, having completed the full course of study in a most satisfactory manner, were graduated with honors, receiving the degree of B. A. The address to the graduating class was delivered by the Hon. John Eaton, Jr., Commissioner of Education. President Gallaudet* sent eloquent words of greeting to the audience and of farewell to the graduating class by means of letters, which were read by Hon. Wm. Stickney, secretary of the board of directors.

Maryland Institution for Colored Deaf-Mutes.—In accordance with a provision of the State legislature, an institution for the education of the colored deaf and dumb and blind of Maryland was opened last October in Baltimore, at 92 South Broadway. Mr. Samuel A. Adams, a deaf-mute gentleman educated at the Philadelphia Institution, has charge of the deaf-mute department.

The Glasgow Institution.—The *Glasgow Herald* of May 9, 1873, contains an account of the annual meeting of the institution. An interesting feature of the occasion was the presentation and unveiling of an excellent portrait of the late Mr. Duncan Anderson, whose eminent ability raised the institution to the high position which it still occupies. The portrait was a gift to the institution from its former pupils.

Death of Mr. Whiton.—Mr. Wilson Whiton, late an instructor in the American Asylum, died suddenly of heart disease in Hingham, Mass., upon the 3d of June last. Mr. Whiton entered the Asylum as a pupil at its commence-

* Dr. Gallaudet's numerous friends will be glad to learn that his year's rest from official labors and his residence and travel abroad have had the desired beneficial effect upon his health, and that we hope to see him back at his post at the beginning of the college year in September, with his old strength and vigor entirely restored.

ment in 1817, and was a pupil with Miss Alice Cogswell and five others in the first class taught by Dr. Gallaudet and Mr. Clerc. After having been a pupil for eight years he became a teacher—being the first deaf-mute, with the exception of Mr. Clerc, so employed in this country—and continued in this position until a year before his death. He was thus connected with the American Asylum as pupil and teacher for fifty-five years, and had been a teacher for forty-eight years—a longer period of active service than that of any other American instructor. Mr. Whiton is spoken of by those who knew him as a man of strict integrity, earnest devotion to duty, and genial manners.

Changes and New Appointments.—In the New York Institution Dr. S. D. Brooks has resigned the office of superintendent and resident physician, and is succeeded by Dr. William Porter of Connecticut, formerly at the head of the Insane Retreat at Hartford. Mrs. H. P. Peet has resumed the position of matron, which she held before her marriage with the late Dr. Peet. Both these appointments are very satisfactory to the residents of the institution. The title of the department of the institution hitherto known as *Domestic* has been changed to *Administrative*.

Mr. F. A. Rising has resigned the principalship of the New York Institution for Improved Instruction, and is succeeded by Mr. D. Greenberger, who was formerly a teacher in the famous Jewish Institution of Mr. Deutsch at Vienna, and more recently has conducted a day-school in Chicago. Mr. Rising, we are sorry to say, leaves the profession to engage in business. His present address is West Winsted, Connecticut.

In the North Carolina Institution Mr. S. F. Tomlinson is succeeded by Mr. John Nichols as principal. Mr. Nichols has been connected with the institution in some capacity (not, we believe, as a teacher) for about twenty years, and therefore has the advantage of entire familiarity with its affairs. We trust that under his management the institution will escape from the unhappy political quarrels that of late have interfered with its prosperity. Mr. Nichols is pe-

culiarly adapted to bring about such a result by harmonizing the conflicting political elements, because, not being a politician, but holding the office of Grand Master and other prominent positions in the Masonic fraternity, he has numerous friends among both parties. Mr. W. D. Cooke, the founder of the institution, and late principal of the Maryland Institution, has been appointed a teacher in the deaf-mute department. Mr. Ellis, formerly steward, has returned to that position.

The Rev. Thomas B. Berry, formerly a teacher in the New York Institution, and later in the Maryland Institution, was ordained to the priesthood of the Protestant Episcopal Church, May 10, 1873, by the bishop of Albany, the Rev. Dr. Thomas Gallaudet preaching an appropriate and eloquent sermon from 1 Cor. iv, 1: "Ministers of Christ and stewards of the mysteries of God." Mr. Berry has charge of St. Paul's chapel in Albany, where he holds a service for deaf-mutes on the third Sunday of every month, at the same time assisting Dr. Gallaudet in the work of the "Church Mission to Deaf-Mutes" in other parts of the State.

Mr. E. G. Valentine, who has been for several years a successful instructor in the Wisconsin Institution, has resigned that position and accepted a similar one in the Indiana Institution. Miss Frances E. Goode, late a valued teacher in the Illinois Institution, will also teach in the Indiana Institution next year.

Mr. George Wing, a distinguished graduate of the American Asylum of several years ago, has become a teacher in the Minnesota Institution.

Mr. Volantine Holloway, a graduate of the Indiana Institution, and Mr. David H. Carroll, a graduate of the Ohio Institution, both of whom have just been graduated from the National Deaf-Mute College with the highest honors, received some time before completing their college course appointments as teachers, to enter upon their duties next autumn, the former in the Indiana, the latter in the Minnesota Institution. In the compensation offered these young men they are ranked, as they deserve to be, with hearing and speaking college graduates.

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A SUMMARY OF THE RECORDED RESEARCHES AND
OPINIONS OF HARVEY PRINDLE PEET. PH. D.
LL. D.—II.

BY HENRY WINTER SYLE, M. A., NEW YORK.

WE will now review the class of subjects in dealing with which Dr. Peet's executive ability, supplemented by his experience as a principal, was most put into requisition.

AGE OF ADMISSION, AND PREVIOUS HOME EDUCATION.

Dr. Peet strongly held that the age of twelve was the best for admission to an institution, if the term was limited to six or seven years. The study of written language is to the deaf peculiarly difficult, tasking all the faculties; if, then, the term is limited, it should be put at the age when the pupil is most capable of mental effort. Children of seven or eight may be quick at first, but are incapable of continued application; youths of twenty have lost too much of their plasticity; the golden mean lies between.

Again, children of an earlier age can acquire better at home than at school the knowledge of every-day facts which is needed as a basis of instruction. Their domestic feelings and attachments are the better for cultivation; the knowledge that dear ones at home think of them will be a stimulus to effort. And they will be brought under the direct and systematic moral and religious training and intelligent supervision of school during the most critical period of life,

when character is formed and habits acquired that will last.

Yet again, young children are lacking in physical endurance; their bodily development demands more leisure and freedom, more individual care, than the organization of an institution will admit; and they are unfitted for mechanical education.

In any case, so little substantial progress can be made during the years preceding the age of 12 that if the limit of age be lowered the term allowed must be extended.

But the child should not be suffered to grow up in utter ignorance and lapse into stolidity. The chief attention should be paid to cultivating his observing and reasoning powers and his moral faculties, and to this end his native dialect of signs should be taken up and improved. But he should be taught to copy words and figures and to make the manual alphabet; and if he is not congenitally deaf, his articulation should be preserved and lip-reading attempted.

COURSE IN WRITTEN LANGUAGE.

When Dr. Peet entered upon his career the great want of the profession was a series of text-books in written language. Of theoretical works its literature had plenty; of practical, scarcely any, except a few vocabularies. He set himself to supply the want; with what success we all know. The First and Third Parts of his *Course of Instruction* must be in the hands of, or readily accessible to, every reader of these pages, and it is to be hoped the Second Part, which unfortunately was not stereotyped like the others, will be reprinted before long. A thorough analysis of the First Part appeared in the *Annals* recently, from the pen of the person next to himself most competent to the exposition of his system—his son. This notice would be incomplete without some mention of the series; but I will confine myself to the principles upon which it was drawn up, and which, as well as the manner wherein they were carried out, he ably defended against so acute a critic as Dr. W. W. Turner.

The pupil for a long time learns written language only from the teacher; the order in which it shall be taught is

therefore completely under control. The order should not be left to be determined by chance; it should be laid out upon scientific principles. Opportunities of teaching particular details for which the pupil is ripe should be seized, but not waited for; neither should they tempt us to impart what he is not prepared to receive.

Dr. Peet's fundamental principles were the three associated respectively with the names of Heinicke, Bébien, and Jacoutot.

HEINICKE'S.—*Ideas first; then words.*

BÉBIAN'S.—*Difficulties should be graduated, and presented one at a time.*

JACOUTOT'S.—*Learn one book well and you will have learned all books.*

The characteristics claimed for his *Course* are:

Gradation.—The real difficulties of written language are those laws and idioms to which there is nothing corresponding in the language of signs. He begins, therefore, with such constructions as most closely correspond to the order of signs, and deviates from it by degrees.

Classification of words of like signification and construction, to assist the memory.

Contrast, to call attention to precisely what is newly presented; for instance, the nature of attributes, of affirmation, negation and interrogation, and of tenses and prepositions.

Repetition, to familiarize the pupil with phrases and clauses as equivalent to single words, and especially to impress correct order. The great source of failure in this last respect is due to insufficient practice in writing on formulas. He insisted, however, that this drilling should be accompanied by *appropriateness*; the sentence written should express the precise idea in the pupil's mind, and be strictly applicable to existing circumstances.

Completeness.—The most commonly recurring irregularities, for instance of plurals, are taught as soon as the general rule has been impressed by a sufficient number of examples. Otherwise the alternative would be presented of allowing erroneous habits or constantly noting exceptions individually.

The general order pursued in the First Part is, *first*, names of familiar objects; *second*, adjectives, which are introduced before verbs, because they are free from inflections; *third*, participles, as the connecting link between adjectives and verbs, and as expressing exactly the idea imparted by a picture, of action, without reference to assertion or time; *fourth*, intransitive verbs, as not requiring the object necessary after transitive verbs; *fifth*, transitive verbs in the active voice; *sixth*, prepositions, first with intransitive participles; *seventh*, verbs in the passive voice. In the Second Part the relative is taught, and a great variety of idiomatic phrases presented, mostly under an ideological classification; and, in the Third, a very useful development of the verb is to be found. Both the latter parts afford reading lessons, in which the new words are for the most part italicized.

Narratives, he judged, should be deferred until sentences had become quite familiar; and the text-books in various subjects prepared for hearing children, until considerable command of connected discourse had been acquired. But both to prevent these subjects from being left till too late, and to enliven the study of language and afford materials for a variety of sentences and simple connected language, he introduced into his Course, mainly in the Second and Third Parts, fully as much general information as could, he thought, be derived in the same time from the study of ordinary text-books.

The *History of the United States* was originally prepared for use in the New York Institution, where a large part had been put in type when the financial difficulties of the institution compelled the printing-office to be closed; and though in the form it finally assumed it was not intended exclusively for the deaf, the ease, simplicity, and perspicuity of style dictated by regard for their wants were preserved, and have in great measure contributed to the large and rapidly-increasing sale for use in common schools which, despite the disadvantage of not being illustrated, it has already attained.

HIGHER EDUCATION.

The term of years during which pupils could be kept in the New York Institution at the expense of the State was in 1821 fixed at three years, in 1825 extended to four, and in 1830 to five; in 1838 two years additional were allowed. At this limit of seven years the term remained until 1853, and in perhaps no other institution was it exceeded. During this period the number of institutions in the United States increased to fifteen, and those which were oldest, largest, most firmly settled in public confidence, and least crippled by the constant premature withdrawal of their most promising pupils by inappreciative parents, began to feel it incumbent upon them to take a step in advance. The establishment of a separate high school, or at least of a high class in one of the existing institutions, was mooted and urged by Weld, Turner, Rae, and Ayres of Hartford, Van Nostrand and Cary of New York, and others.

In the discussion Dr. Peet displayed a lively interest, interposing pertinent remarks drawn from his extended observation and thorough familiarity with practical details of management. The event which most immediately led to the establishment of the New York high class appears to have been his inspection, in 1851, of the *classe de perfectionnement* of the Paris Institution, founded by Itard, and then under the charge of his old colleague Vaisse—one of the episodes of his European tour upon which he dwelt with evident interest. The following summer, shortly after the report of his tour, in which he introduced the subject, he presented a masterly report on the education of the deaf in the higher branches of learning. In compliance with the recommendations therein contained a high class was established for a year, as an experiment—an experiment which speedily proved entirely successful, and worthy of the continuance it received. The basis he proposed for it was as follows:

The results attained in the seven years' course, when completed by a pupil of fair ability, were indeed highly

gratifying, and were sufficient to prepare him for the life of a farmer or of a mechanic. But they did not include the power of reading and writing with such ease and fluency, or such an acquaintance with the various branches of knowledge, as to qualify him to choose, appreciate, and be acceptable to intellectual society, or to engage in occupations of a higher and more remunerative character, from which his physical infirmity alone would not debar him. Especially did their incompleteness limit his usefulness as a teacher. The remedy was that indicated by Itard.

A high school would indeed be desirable, but great practical difficulties intervened, not least of them the choice of a location; difficulties to meet which greater unanimity of concerted action could be had when the limits of the power of the institutions individually had confessedly been reached. But first let each institution do all it could; the effort would probably be repaid by the reflex action upon the younger pupils of the presence of a more and more advanced class, and by the occasional services of its members as substitutes for teachers disabled by sickness or other temporary causes.

The standard for admission into the high class should be that of the better portion of the graduates of the regular course. The term should be at least two years; three, as at Paris, would be better. The studies should be the higher branches of an English education, with especial training in the English language. The seventh year studies should be continued, and carried into the higher departments of mathematics, natural philosophy, and other sciences. Special studies might be allowed to those who displayed unusual talents in a particular direction, such as the languages or applied mathematics. The members of the class should have such privileges as would make the difference between them and the other pupils appreciable and stimulating to both, and should be entrusted with a share of authority as monitors, but should continue subject to the general regulations of the institution, and in particular, for their own good, they should continue the learning of trades.

The instructor to whom the guidance of the class through

so extended a field was committed should be selected for his superior character and eminent qualifications. He should be a man of talent, thorough education, varied and accurate information, ability to command attention, and especially of rare facility in the use of signs. His character, manners, and social position should be such that he could creditably act as vice-principal *ex officio*. With the growth of the class and the enlargement of its course of study, an additional professor, or even more than one, might be required.

Such was the basis upon which the New York high class was started. The anticipations entertained have been fully realized; it is sufficient to note as one of these that out of the nine composing the first graduating class, five were immediately engaged as teachers in their own or another institution, and at least thirty-five of the subsequent graduates of the high class are known to have since entered the same profession.

MORAL AND RELIGIOUS EDUCATION.

Of the motives leading to the establishment of institutions for the deaf, not one of the least was to impart religious instruction to these "heathen in the midst of a Christian country;" yet there was, so lately as thirty-five years ago, such general ignorance of the fact of such instruction being given, that it was considered necessary to assert the fact strongly, and to give a detailed account of the principles and procedure.

The moral feelings of the deaf are weaker than those of ordinary children. They are amenable to the fear of punishment, the sense of shame; but complete moral restraint can be effected only by the knowledge of an all-seeing God. To impart this, the faithful teacher who feels himself responsible for the care of their souls does not wait till they have learned to read, but impresses it at the earliest moment through the graphic medium of signs. He finds the great truths of religion received with the simple faith of childhood. The foundation is the immortality of the soul, and the existence of an eternal God who rewards and punishes. Next come man's inability to keep the law of God

blameless; the necessity of a Mediator; the character of Christ, and the history of God's people in all ages.

As soon as the pupil begins to comprehend simple sentences, he has the volume of *Scripture Lessons* Dr. Peet prepared put into his hands, where he finds, expressed in language level to his understanding, an exposition of the attributes of God, the immortality of the soul, and the chief moral duties. (The admirable adaptation of this unpretending little book to youthful minds is shown by the steady demand for it, no less than eighty-eight thousand copies having already been issued by the American Tract Society of New York, to whom Dr. Peet presented the copyright upon revising it in 1849.) With the pupil's introduction to narrative discourse, he enters upon the history of the human race; and when his command of language permits, he reads selections from the Scriptures themselves.

It is one of the highest and purest glories of the "American System" that it introduced the practice of assembling the whole household of an institution, daily as well as weekly, for public worship, common prayer, and the systematic exposition of the Word of God. Dr. Peet was earnest and untiring in the maintenance of this practice, even when it imposed upon him the labor of conducting the daily chapel services morning and evening for weeks in succession, as well as taking his turn to lecture on Sunday.

Though the cares of his own position pressed heavily on him, yet he found time to display, by word and deed, a warm interest in the welfare of his former pupils. Particularly cordial and valuable was the aid he rendered to his coadjutor, the younger Rev. Dr. Gallaudet, in his mission to the deaf who have passed outside the walls of an institution, and are making their own way in the world, often feeling keenly their isolation. No sectarian bigotry or denominational preferences held him back from giving a helping hand. It is to be regretted that so little has been preserved of the addresses in which he advocated this most Christ-like work.

In connection with this topic, we may advert to the re-

marks on prizes he made at the seventh convention. Others had denounced them as an excessive stimulus, and as inevitably exciting hard feelings between the contestants and the suspicion of favoritism. He, however, declared that they could be fairly won, and the fairness be universally acknowledged; and that they were useful even to the many who failed to win them, by encouraging efforts to make the greatest possible advancement, both in intellect and in morals.

MECHANICAL EDUCATION.

The physical care of his pupils, and their training in mechanic arts by whose practice they could earn a respectable support, were with Dr. Peet objects of great solicitude. As has already been mentioned, he remarked on the greater attention to health they demanded than would hearing children, on account of their liability to scrofulous and particularly pulmonary affections, and the debilitation of their systems, accompanying their deafness, or due to the same causes which deprived them of hearing.

In discussing the question of trades, he said the pecuniary aspect should be disregarded; it might as well cost money to teach a trade as it does to teach language, and the money should not be begrudged, if only for the reason that a boy who works part of the time makes greater intellectual advancement than one who spends it in idling about. The true points to consider were, which trades were most likely to afford steady and remunerative employment in after life, or such skill in the use of tools as could be turned to account in other handicrafts. In the first category he placed shoemaking and tailoring; in the second, cabinet-making. Printing and book-binding could be usefully prosecuted only in institutions in or near large towns. The arts of design could be directly profitable to only a few, but some training in them was beneficial to many more.

QUALIFICATIONS OF A TEACHER.

The high proficiency in the practice of deaf-mute instruction which, united to his efficiency in domestic management,

indicated him as the man of all others to retrieve the falling fortunes of the New York Institution, was acquired during a term of service at Hartford of no less than nine years. During his first year at New York he was compelled not merely to superintend the whole establishment, but also to take personal charge of a class; and in after years he repeatedly undertook a similar task upon emergencies—notably during the entire term of 1845–6, rather than add to the labors of his associates by disturbing the whole system of classification, he assumed the charge of the one-half remaining of the last term's highest class. He thus had an intimate acquaintance with the daily demands made upon a teacher, in whatever grade; while from his elevated point of view he was enabled to judge of the effect upon the whole school of the presence or absence of certain qualities in a teacher.

We have already seen what qualifications he demanded in the instructor of the high class; but in all teachers he looked for a high order of social and mental culture, habits of perseverance, and a kindly disposition. The loftier the intellectual powers, the more thorough and liberal the education, the better. The teacher should be educated to take any class whatsoever; nor should he deem it beneath his dignity to be assigned the youngest, for the greater his resources the more rapidly he would be able to bring it forward. An inexperienced teacher might, however, take a class of beginners with advantage to both, for each would learn from the other.

Holding the exalted views we have seen of the naturalness and capabilities of the language of signs, and himself employing it with the thorough mastery for which he was so singularly fitted by constitution and temperament, one of the duties he most strongly insisted upon for a teacher was diligent study and careful practice of gestures. No teacher, said he, could be efficient who had not made himself familiar with the colloquial dialect of signs, as well as with their primitive and expanded forms and scientific principles. The latter he should be taught by his seniors, as

he himself had been by Gallaudet and Clerc—indeed, such instruction should be a regular duty of the principal; but the former could be acquired only by the means which he himself had employed with equal assiduity—observing and associating with the pupils themselves.

The brief and pithy advice he gave to the student of signs was: Learn to sign well before you try to sign fast. Let your signs be large and deliberately made, and especially be careful to preserve the proper expression and attitude, and the appropriate locality. In learning a new sign, seize on the most striking characteristic.

One branch of this subject in particular there was whose importance impelled him to expound it in an elaborate paper—the personal character of the teacher, considered in reference to the influence of his example upon the character of his pupils. To him, said Dr. Peet, is committed the first awakening of their intellects and their hearts; more than in the ordinary cases of education do his teachings, and especially his example, shape and color their whole subsequent existence, and rarely do his purity of motives and consistency of practice, or their reverse, escape their close observation.

His first need, therefore, is of self-examination, to assure him that his own heart is right toward God and his neighbor, and especially that it is in his work; that his spirit is a missionary spirit. Evident attachment to his work will win the affection and respect of his pupils, and thus lighten his task. His precepts should be well-timed, consistent, and of an elevated tone; his public and private walk should confirm and illustrate them. Nor is it beneath his notice to observe such minor virtues as neatness in dress, propriety and courtesy in daily intercourse, or to avoid such offensive habits as lounging about, sitting with the feet higher than the head, and using tobacco. Industry, punctuality, and regularity should mark the discharge of his daily duties. Above all, he should manifest a sacred regard for candor and justice, and perfect purity of thought, conversation, and manners.

For the attainment of the standard here set the surest guarantee is sincere and strong religious convictions. He whose every thought and act is dictated by genuine piety, and he alone, will be to his pupils no mere drill officer, but a father and a friend.

QUALIFICATIONS AND RESPONSIBILITIES OF A PRINCIPAL.

The topic just treated naturally leads to one to whose discussion he equally brought prolonged personal experience and observation, and his treatment of which is equally of deep interest to teachers in general, while having especial value to those looking forward, as many reasonably may, to the office of principal, to those who have already attained it, and to the trustees responsible for the award. Here we are not left to glean his views from many scattered utterances; they were laid before the readers of the *Annals* in a complete form, and the task of abridgement is alone imposed upon us.

A principal needs to possess in an eminent degree the qualifications of an experienced teacher, in order that he may exercise due discrimination in the selection of his assistants, train those new to the work, maintain uniformity, devise and carry out improvements in the method, render aid at need in the school-room, temporarily fill vacancies, and conduct public exhibitions.

There are duties of a different nature also peculiar to his office: classification and discipline, the arrangement of the course of study, the oversight of domestic affairs and mechanical education, and the care of the property of the institution, conducting correspondence and receiving visitors, and urging upon trustees measures of improvement, upon legislatures and the public, the claims of the deaf and dumb.

To meet these varied demands he requires a good physical constitution, more than average nerve, and the power of command, tempered by self-control. In his intercourse with his subordinates he should ever show a tender regard for their feelings, and while setting up the ultimate welfare

of the institution as the common object for whose attainment he is more directly responsible, manifest himself ready to do and to bear his full share. Firm and decided where there is need, he should seek to win affection as well as confidence, and should guard against the faults growing from an exaggerated idea of his own dignity and responsibility, and especially against unwillingness to consider and adopt improvements. As an administrative officer, he should display such a command of details as facilitates, not prevents, a grasp of the whole system; and should exercise correct judgment in the selection of his assistants and the apportionment of their duties, and rigid firmness, though united with kindness, in dealing with those who prove unfitted for their posts.

In him even more than in a teacher is a superior education necessary, but the foundation should be more than common intelligence; he, too, should have deep moral and religious feelings and convictions, evinced in practical fruits rather than employed in keeping up appearances, and should set an example of correct habits.

The paper concludes with practical advice to those preparing for such a post, counselling them to high culture, physical and mental, efficiency in teaching, and familiarity with administrative affairs.

ORGANIZATION OF INSTITUTIONS.

The relations between the principal and his subordinates have just been alluded to; those he sustains to the trustees of his institution are equally delicate, and equally need to be clearly defined. Both were treated, but more especially the latter, in a report Dr. Peet presented to the fourth convention, which, hastily as it was prepared, embodied his mature convictions.

He was strongly of opinion that, on the one hand, the action of the trustees should be limited to confirming or disapproving regulations proposed and nominations made by the principal; and on the other, power should be concentrated in the principal's hands instead of being shared with a faculty, especially in new institutions.

To sustain the first proposition, he adduced the fact that boards of trustees are usually composed of men selected for their general intelligence, benevolence, leisure, or influence in society, but who cannot be conversant with the numerous and peculiar practical details of the management of an institution. They cannot know as well as a qualified principal the best practice elsewhere, and what changes are desirable. Just as they are responsible to the legislature and the public so should he be to them; just as they would be justly censurable if they appointed or retained an unfit man, so would they be if they tried to thwart or fetter a man they acknowledged to be fit.

Passing over in a brief recapitulation the other executive duties which should be assigned to the principal, Dr. Peet argued at length that he should have the nomination of his assistants, on account of the importance of mutual confidence and cordiality between the latter and himself, and of his having power to see that the course of lessons, for the results of which he was held primarily responsible, and which therefore should be prescribed by him, was strictly followed. By the interference of boards in this matter of selecting teachers he had seen the affairs of more than one institution deranged, and valuable men lost to it, and even to the profession.

With regard to the second point, granting that the advice of the teachers should be sought by the principal, (as he believed it usually was,) and that the best system would work badly unless there was a disposition on both sides to yield something, he laid down the broad general principle that where the responsibility was, there should be the power of ultimate decision.

To return for a moment to boards of directors: he thought that a small number was more efficient and more likely to arrive at correct conclusions than one of twenty or twenty-five; but the larger number might do, if five or seven were a quorum.

LEGISLATION.

There was happily no occasion for Dr. Peet to introduce

freshly to legislative bodies the claims of the deaf and dumb; they had already been recognized. His was the more difficult, unremitting, and tedious task to retain the attention aroused, and see that the fresh interest excited by new advances in education took a practical form in the extension of the advantages the institution was enabled to confer, by the increase in the number of pupils to be received at the public expense, and by the lengthening of their term. The extent of his labors may be estimated by a comparison of the report for 1831, the first after he became principal, with that for 1867, the first after his retirement. In 1831 the number of pupils was 85, of whom 56 were supported by the State of New York. In 1867 it was 439, of whom 297 were supported by the State and 88 by its counties; adding 25 supported by the State of New Jersey, the total is 410; the number dependent upon other means of support being the same, viz., 29, in each year. Again, in 1831 the term allowed for State pupils was *five* years. In 1867, the laws of New York stood so that a child could be educated, boarded, and clothed at the expense of his county from the age of six to that of twelve, and at that of the State for eleven years, (that is, if he attained admission into the high class,) commencing between the ages of twelve and twenty five; the total time allowed being *seventeen* years. The provisions made by New Jersey are but little less liberal. Thus, in a period of thirty-six years, the total number of pupils was increased five-fold, that of public beneficiaries more than seven-fold, and the length of the term of instruction was more than trebled.

The arguments by which these gratifying results were little by little obtained were the same as those employed under similar circumstances by the gentlemen in charge of the other American institutions; their nature is thus too familiar to the readers of the *Annals* to require explanation, and the cogency of his presentation of them can be appreciated only by reference to it in his various reports. There is thus little left to note of what he said with reference to the connection of the State with the cause of deaf-mute

education, save on two subjects: the requirement of indigency in the parents or guardians, which some States make, as a condition of the mute being placed on the free list, and the proposal to make education compulsory.

The condition of indigency might, he thought, be one necessary for new States to make at first, and he therefore would not condemn it unreservedly; but in the older ones, and especially in his own, he considered it highly objectionable. He labored earnestly to secure its abolition in New York, but this was left for his successor to accomplish, as there is hope will soon happen. The lapse of time has only added force to the objections he brought against it, as being *unfair and invidious*, since those who paid the highest taxes were debarred from benefiting thereby; *inconsistent* with the perfect freedom of the common-school system, and *exceptional* to the general practice of other States.

Time and again did he deplore the ignorance or indifference of parents, whereby deaf children were kept at home uneducated until the plasticity of youth was irrevocably gone, or withdrawn when their education was in reality barely commenced. But the evil was to be remedied only by the creation of a more healthy and enlightened public sentiment. The temper of the American people would not brook laws compelling parents to send their deaf children to school, especially when no choice was offered between schools of different systems and religious denominations, or obliging them to leave them there a fixed time.

LEGAL RIGHTS AND RESPONSIBILITIES.

The duty of the State in the education of the deaf, as of all its children, however important in itself, is but a small portion of the mutual rights and obligations arising from the peculiar condition of the deaf and dumb. The status of individual deaf-mutes in the eye of the law, and the manner in which they are to be dealt with when they seek its aid, are called before it as witnesses, or are charged with offences against its majesty, form a subject by his treatment of which Dr. Peet will, perhaps more than by any of his other labors, be known to posterity.

The exhaustive character and clear and rational conclusions of his treatise are strikingly in contrast with the fragmentary and discordant nature of the materials from which it was constructed. The chapters on the deaf to be found in even such authorities in medical jurisprudence as were then standards are merely a collection of cases, mostly from continental Europe, crudely and inadequately treated. In Great Britain there was nothing, and in the United States very little, of statute law. From the great variety of cases, the common law was not settled; and the individual cases had to be hunted up, with hardly a clue to guide the inquirer, from the recesses of a great number of bulky reports of decisions. Except the *Dissertatio de Jure Surdo-mutorum* of Dr. R. T. Guyot, 1824, no previous work of the kind was readily accessible; and even this could be of but limited service.

Dr. Peet's work may be divided into three parts: a sketch of the history of the subject, a statement of its present state, and general principles and recommendations for guidance in the future.

I. *Legal status in the past.*

The deaf have rarely called for legal notice, unless with regard to their estates or as arraigned for trivial offences, though in a few cases melancholy evidence has been given how violent are the passions of a man devoid of the restraints imparted by education and social intercourse. The early scattered cases were treated, not according to arbitrary rules, but according to the degree of intelligence manifested by the individuals.

In the Code of Justinian, where an elaborate classification appears, (so elaborate, indeed, as to be in part purely imaginary,) the general principle was that no valid contract can be made or assent given except by *words* spoken or written. A similar disqualification of deaf-mutes existed under the feudal law. In England, the custody and surplus proceeds of the estate of a deaf-mute during his life were first given to his feudal lord; then, by Edward I, assumed to the king; but during the Commonwealth were brought under the ju-

risdiction of the Court of Chancery. In the United States, the jurisdiction has usually been vested in courts of equity, and its exercise initiated by a writ *de idiota (vel de lunatico) inquirendo*.

II. *Present state of the law.*

1. *Disposal of property*.—The old rule, as stated by Chancellor Kent, was in effect that a person who was deaf and dumb was not therefore necessarily incompetent to execute a deed, but that the presumption was *perhaps* against him, requiring proof of capacity. Recent French, English, and American decisions (cited in the *Herald of Health*) concur in admitting a will made by a deaf-mute, even if also blind in advanced years; and even a testamentary act performed in signs, by means of a qualified interpreter.

2. *Marriage*.—Under the English common law, there never was any doubt of the capacity of a deaf-mute, if *compos mentis*, to contract marriage, and the validity of a ceremony performed in signs has been expressly recognized. The rigor of the Roman civil law was relaxed by the church in the twelfth century into a similar doctrine, which is now generally held, where that is the basis of the national law. The *Code Napoléon* leaves it to the discretion of the magistrate before whom the civil ceremony is to be performed to sanction or interdict the marriage, according to the degree of intelligence displayed. In Switzerland, the consent of the magistrates is required to be sought and obtained in open court. In Prussia, the union of two deaf-mutes is, it is said, prohibited.

3. *Interpreters*.—When deaf-mutes appear before tribunals as complainants, witnesses, or accused, much embarrassment often results from their inability to comply with the usual forms. The Supreme Court of Connecticut has ruled that notice was to be taken when signs were a more perfect mode of communication than writing; and it is now customary in this country to call in as interpreter either a teacher of the deaf, or a person familiar with the peculiar dialect of signs employed by the particular deaf-mute. The

Code Napoléon, on the contrary, allows an interpreter only when the mute is unable to write.

4. *Comprehension of an oath*.—The greatest difficulty with uneducated deaf-mutes is in ascertaining their view of an oath; but their possession or want of religious belief affects only their credibility, not their competency, as witnesses. On other grounds there may be room for difference of opinion as to their competency.

5. *Trial*.—When a deaf-mute has been charged with a crime, technical difficulties connected with the mode of arraignment have often been interposed, leading to dismissal of the accused without trial; but in a case in England a jury found that the prisoner was “mute by visitation of God,” and a plea of Not Guilty was ordered to be entered. The present general tendency of English and American law is to treat an uneducated mute guilty of a grave crime, as so far an idiot as to be incapable of trial, but as requiring, for the public safety, to be sentenced to confinement during the pleasure of the Queen or of the court.

III. *General principles.*

1. Mere inability to read and write is not sufficient to exclude a deaf-mute from civil rights. He may yet possess adequate intelligence to make all civil contracts and to give evidence by signs.

2. Where doubt exists as to the degree of intelligence, it should be settled before the contract is attested or the evidence admitted, and the best person to decide it is an experienced teacher of the deaf.

3. The degree of acquaintance with written language is to be ascertained with skill and care, and the mode of communication decided thereby. A person who uses idiomatic English freely and spells by the sound cannot be a congenital deaf-mute. Many who have had more or less instruction are yet imperfectly acquainted with written language, but can express themselves and be communicated with freely and accurately by means of signs.

4. When the deaf-mute can read and write with perfect

ease, this mode of communication with him should be adopted; otherwise he should be communicated with by signs, through a competent and sworn interpreter.

5. Such an interpreter should be furnished, to keep a mute apprised of the course of a trial in which his interests, property, liberty, or life are at stake.

6. The best interpreter is usually to be found in an experienced teacher. But there are cases where a mute has formed with some intimate acquaintance a peculiar dialect intelligible only to themselves.

7. Due regard should be paid to the ignorance and the neglected condition of many uneducated or imperfectly-educated deaf-mutes, their superficial acquaintance with what is going on in the world, and their liability to acquire erroneous impressions of what they witness.

8. When an uneducated deaf-mute is arraigned for a serious crime, trial is requisite of the question whether he is dangerous or not; and confinement should be ordered only when it is proved necessary for the security of the public.

HISTORY OF THE ART OF INSTRUCTION.

Second only, if second at all, to the profound and laborious research required for the Treatise just considered, was that shown in Dr. Pect's investigations into the history of the education of the deaf. In the Memoirs read at the first and fifth conventions, the article in the *Herald of Health* for November, 1867, the paper on Recent Progress read at the seventh convention, and the historical and biographical notices and analyses of methods interspersed through the narrative of his European tour, he gave a connected and copious account of the whole history and present state of the art. *Résumés*, more or less lengthy, intermixed with the treatment of one or another of the kindred topics we have glanced at, he frequently presented—for instance in his public addresses.

The First Memoir records the scanty mention of the deaf in the classics, and sketches the views regarding them held by the ancient philosophers, the fathers of the Church,

and the mediæval schoolmen, who made Aristotle their Bible. The principal instruments of communication are detailed, and the history related of the invention or application of each by the early isolated teachers and theorists. The first of these, Pedro Ponce de Leon, is treated at length; next comes Bonet, of whose *Reduccion de las Letras y Arte para Enseñar a Hablar a los Mudos*, the first practical treatise on the art, a very full analysis is given; and then the subsequent Spanish instructors. A rapid glance is given at those in Italy and England; Amman, in Holland, is mentioned at some length, and, last, the efforts in Germany are sketched.

The Second Memoir describes what Degérando has called the period of institutions, beginning with the time when, within a few years of each other, (1755-'60,) arose the founders of our present systems, De l'Epée, Heinicke, and Braidwood, and instruction began to be widely diffused under the patronage of the State. A very full account is given of De l'Epée and the genesis of methodical signs, and of his contemporaries, Pereire and Deschamps; then of his great compeer, Heinicke, and of the famous discussion between these two champions; and passing on, the line of German teachers, Reich, Hill, Jäger, and Neumann, is traced down to the present time. Turning to Great Britain, we read of Braidwood, and his nephew, the elder Watson, of whose "Instruction of the Deaf and Dumb," 1809, an analysis is given, while Baker and other living British teachers are briefly mentioned. The devoted Guyot and his equally laborious and accomplished sons, at Gröningen, have due mention. Returning to France, we have a long account of Sicard, and an analysis of his *Théorie des Signes*; sketches of Bébien, Degérando, Recoing, Jamet, and the most distinguished living French teachers. A cursory glance is given at the work in the other countries of Europe, and at its introduction here by Gallaudet and Clerc.

The growth of schools had now become almost too rapid to trace, and in almost every school, every class-room, the

teacher impressed somewhat of his own individuality upon the processes he employed. But all may be referred to one out of a small number of classes, whose distinctive tenets he sketched in the *Herald of Health*. The courses of instruction in language drawn up by the Abbé Pendola of Sienna, Lenoir and Pélissier of Paris, and Cook of Edinburgh, are analyzed more or less fully in the account of his European tour. The growth of his own institution was summed up at suitable periods in his reports; the methods and books employed and the advances made during the year by each class have been recorded annually since 1843. In the paper read at the seventh convention, the charge that the art had failed to produce in the hands of their successors the attainments evoked by the first American teachers is combatted and overthrown by a direct comparison of results.

COMPARISON OF PERIODS.

The great points of contrast between the successive periods are thus summed up.

The teachers of the First Period arose at distant points and at long intervals, nearly everyone ignorant that any had preceded him, inventing and re-inventing processes, confining himself to a few pupils, concealing his methods or shedding around them a veil of mystery, and making of the art a gainful speculation.

Those of the Second publicly announced and vigorously discussed their theories and processes, ennobled the art into a charity, a mission, and were not merely ready, but desirous, to train up teachers for other schools. Indeed, this epoch has derived its greatest interest from its publications, both theoretical and practical.

Again, comparing the earlier and later teachers of the Second Period, we note—

The earlier teachers devoted their attention to the mechanical means of communicating language to the deaf and the most judicious modes of enabling them to employ it; the later, to the wisest modes of practice and the comparative merits of systems.

Among the earlier, the great merit of a system consisted in its giving more or less prominence to one or another of the means of communication with the deaf; with the later, it has been esteemed of much higher importance with what method ideas and words should be classified, and in what order presented to the mind. The art has thus acquired an element of scientific precision it previously lacked; having better theories, we have better light to guide our steps.

PRESENT SYSTEMS.

Still, a century of warm discussion and of abundant experiment has only increased the divergence of theories and of the systems based thereon. The latest classification adopted by Dr. Peet was as follows:

1. *The Old German School*, who hold to articulation in all cases and try to teach thereby, but make great use of signs. This is, by Day, divided into two branches: the "Saxon," led by Reich of Leipzig, son-in-law of Heinicke, and the "Württemberg," led by Jäger of Gmünd. They differ somewhat in practice, the former beginning with a long vocabulary, the latter with complete sentences.

2. *The New German School*, (the "New Prussian" of Day,) who seek to dispense with signs as much as possible, and endeavor to make articulation and lip-reading the main *instruments* as well as *objects* of instruction. Their acknowledged leader is Moritz Hill, of Weissenfels.

3. *The Old French School* of De l'Épée and Sicard, who seek to make a definite symbol for each word of the language in the order of the words, (that is, who use methodical signs,) holding that the deaf cannot read without substituting mentally a sign for every word.

4. *The New French and American School*, who rely upon the colloquial signs of the pupil and the natural language of pantomime.

5. *The School of Intuition or Usage*, who, taking but one or two pupils at a time, discard the use of pantomime altogether, except a few simple signs at the outset, the first words being taught by pointing to objects and actions, and these words used to explain other words.

UNTO ALL—AN END.

It remains only to note the memorials that came from Dr. Peet's pen of some among those who fell by the way while he was spared to press on.

Gallaudet, noble mind, pure heart, distinguished for lofty disinterestedness, wise adaptation, practical skill; and Clere, won here from the school of which Bébien styled him the glory and support—the early preceptors at whose feet he sat; Cary, whose memory is still embalmed in many hearts; Totten, one of the first and most reliable of teachers themselves deaf; Miss Dudley, rendering with singular benevolence and womanly tact valuable aid in domestic cares—his tried and prized associates of many years; and Jacobs, earnest and self-sacrificing from his youth; Hutton of Philadelphia, kindly, courteous, wisely conservative; and that other Hutton, whose rare devotion and ingenuity Scotland gave to America—distinguished fellow-leaders in the work on either hand—all these had from him the last sad meed of praise.

And now his laurel-crowned* head rests in the grave.

APPENDIX.

CATALOGUE OF DR. PEET'S PUBLICATIONS.

NOTE.—Inquiries have been made regarding the Summary which might in part be answered by a reference to its introduction, but a brief reply to which will not be out of place here.

The motive for undertaking it was, what is also justification for the length to which it has run, Dr. Peet's position as a *representative man*. In America, he was acknowledged as a leader; in Europe, his name is better known than any other in the profession on this side of the water,

* A touching incident occurred when Dr. Peet's remains were carried home. Just before the casket was finally closed, a crown of laurel, made by the hands of one of his most gifted and beloved pupils, Miss M—, was placed upon his head; and with this last exquisitely-poetic tribute the venerated face was veiled from sight.

except, perhaps, that of Gallaudet. The mature opinions of such a man have an historical interest.

The researches Dr. Peet conducted, too, were on such a scale and of such value as to merit more than a passing notice; and in placing before the English-reading public, in a convenient form, an epitome of the historical facts collected by Degérando, Schmalz, Guyot, and others, whose works are almost inaccessible here, he did no slight service.

But in summing up his opinions, I do not mean to record an unqualified adhesion to them. On the contrary, I desire to be held responsible—as I am willing to be held strictly accountable—only for rigid accuracy of representation.

To learn these opinions and trace these researches, recourse has been had solely to publications appearing with his name, including, of course, his remarks at conventions as officially published; and these alone are detailed in the following catalogue. To this rule there is only one exception—in the case of the reports of the New York Institution. Not until 1862 did an annual report by the principal form a regular part of these documents. But the reports of the board of directors in previous years had Dr. Peet's signature, from 1831 to 1844 as secretary, and for the next fifteen years as president of the board; and while not assuming the sole or even the chief authorship of these papers, he was held and held himself mainly responsible for their contents. Though some of the views put forth in the earlier ones were modified in later years, yet any sketch of his career would be incomplete in which all were not duly noted.

The Classified Index follows the order of the Summary, and refers minutely to everything in the List by Titles, with very trifling exceptions. Reference is made exclusively by date and page. It has been represented to me by high authority that, in the case of the *Annals* at least, reference by volume and number would be preferable to that by date. But with all deference, I feel constrained to adhere to a choice very deliberately made, since to insert both sets of references would too greatly increase the length of the index. The object being to afford a connected view of our author's

views, as recorded in different periodicals and detached essays, the use of the dates presents most clearly the chronological sequence of the various records.

I.—LIST BY TITLES.

- I. *Reports of the New York Institution*, from the Thirteenth, for 1831, to the Forty-ninth, for 1867.
- II. Contributions to the *American Annals of the Deaf and Dumb*, from Vol. ii, No. 3, April, 1849, to Vol. xvi, No. 1, January, 1871.
 - Statistics of the Deaf and Dumb, (Reports for 1852 and 1853, and *Proc. Med. Soc. N. Y.*)
 - List of the Pupils of the N. Y. Institution to Jan. 1, 1854.
 - Notions before Instruction, (*Bibliotheca Sacra.*)
 - Visit to the Clarke Institution.
 - Elements of the Language of Signs, (Second Convention.)
 - Discussion of Methodical Signs with J. A. Jacobs.
 - Discussion of the Course of Instruction with W. W. Turner.
 - Letter on an Institution for Adults.
 - Duties and Qualifications of a Principal.
 - History of the Art of Instruction, First Period, (First Convention.)
 - Recent Progress in the Art, (Seventh Convention.)
 - Obituaries of T. H. Gallaudet, (Report for 1851,) Miss Dudley, J. A. Cary, N. M. Totten, L. Clerc, J. A. Jacobs, A. B. Hutton, and G. Hutton, (the four last, Seventh Convention.)
- III. Papers, Reports, and Observations at the *Conventions of American Instructors*, from the First, in 1850, to the Seventh, in 1870.
 - First*, New York, 1850. (Report for 1850.)
 - Memoir on the Origin and Early History of the Art of Instructing the Deaf—down to De l'Épée. (*Annals.*)
 - Second*, Hartford, 1851.
 - Elements of the Language of Signs. (*Annals.*)
 - Third*, Columbus, 1853.
 - Personal Character of the Teacher considered in reference to the Influence of his Example on the Character of his Pupils.
 - Fourth*, Staunton, 1856.
 - Legal Rights and Responsibilities of the Deaf and Dumb. (*Am. Journal of Insanity.*)
 - Statistics, and the N. Y. State Census of 1855.
 - Report on a Syllabic Dactylogy.
 - “ a new Manual Alphabet.
 - “ the Organization of Institutions.
 - Fifth*, Jacksonville, 1858.
 - History of the Art of Instruction, Second Period—De l'Épée to Gallaudet.
 - Sixth*, Washington, 1868. (Report Columbia Institution for 1868.)
 - Order of First Lessons.
 - Seventh*, Indianapolis, 1870.
 - Recent Progress in the Art of Instruction. (*Annals.*)

IV. Series of Articles in the *Herald of Health*, New York, from Vol. x. No. 1, July, 1867, to Vol. xii, No. 3, September, 1868.

1 and 2. Physical Characteristics of the Deaf, Cause and Cure of Deafness, and Statistics.

3. Intellectual, Moral, and Social Condition of the Uneducated.

4 and 5. Systems of Instruction, Articulation, Signs.

6 and 7. The Language of Signs.

8 to 11. Legal Rights and Responsibilities.

Also, September, 1868, Letter on Articulation, (in reply to one by Mrs. Horace Mann in May, and replied to by her in November.)

V. Contributions to *Various Periodicals*.

Voice for the Dumb, Edinburgh, March, 1849. Letter describing the American System.

Proceedings of the Medical Society of the State of New York, June 25, 1852. Statistics, Causes and Cure of Deafness. (*Annals*.)

Bibliotheca Sacra, No. xlvii, July, 1855, pp. 557-596. Notions before Instruction. (*Annals*.)

American Journal of Insanity, Vol. xiii, No. 2, Oct., 1856, pp. 97-171. Legal Rights and Responsibilities. (Fourth Convention.)

Hours at Home, January, 1868. Early History.

VI. *Addresses, Essays, and Reports* published or reprinted in pamphlet form.

Address at the Dedication of the Chapel of the New York Institution, December 2, 1846.

Address at the Laying of the Corner-stone of the North Carolina Institution, April 14, 1848.

Address at the Semi-Centenary Celebration of the New York Institution, June 26, 1867.

Report of a Visit to European Institutions in 1851: February 10, 1852. (Report for 1851.)

Report on Education in the Higher Branches of Learning, June 8, 1852.

Statistics, Causes and Cure of Deafness, 1852. (*Proc. Med. Soc. N. Y.*, and *Annals*.)

Notions before Instruction, 1857. (*Bibliotheca Sacra* and *Annals*.)

Legal Rights and Responsibilities, 1856. (Fourth Convention and *Am. Jour. Insanity*.)

Letter to Pupils on Leaving the Institution, 1847.

VII. *Text-books*.

Course of Instruction—Part I, Elementary Lessons, 1844, revised 1846: 11th edition, 1871.

Part III, published as Part II, 1845; 8th edition, 1872.

Part II, 1849. Out of print.

Scripture Lessons, 1846, revised and presented to the American Tract Society, N. Y., 1849; 89th thousand, 1873.

History of the United States, 1869.

II.—CLASSIFIED INDEX.

A. signifies the *Annals*; C., the Proceedings of a *Convention*; H., the *Herald of Health*; R., a *Report* of the New York Institution; =, a reprint.

Utility of Statistical Inquiries—R. 1836, 12-13; 1841, 15.

Physical Characteristics—H. 1867, July, 17-18.

Number and Proportions—R. 1836, 23-33, 53-79; 1841, 16-22; 1853, 35-61; 1862, (N. Y. edition,) 25-39. A. 1852, Oct., 1-21. = Proc. Med. Soc. = Pamphlet, 7-31.

Causes of Deafness—R. 1836, 13-23, 50-53; 1841, 23-24; 1853, 61-94. Proc. M. S. = Pamph., 32-33.

Deafness in Families—R. 1836, 33-49; 1853, 94-118.

Cure of Deafness—R. 1836, 79-84. Proc. M. S. = Pamph., 33-37. H. 1867, Aug., 74-77.

Condition of the Uneducated—H. 1867, Sept., 105-108.

Religious Notions before Instruction—A. 1855, Oct., and Pamphlet, 20-44, = Bib. Sac.

Origin of Language—A. 1855, Oct., 4-19, = *al*.

Signs a Natural Language—A. 1855, Oct., 8-10, = *al*. R. 1838, 14-15, 31-34.

Articulation—R. 1833, 30-36; 1840, 10-15; 1844, 14-16; 1845, 99*-105*; 1851, 25; 1866, 33-36. H. 1867, Dec., 230-234; 1868, Aug., 77-80. A. 1869, April, 82-88.

Articulating Day Schools—R. 1861, 22-32.

Common Schools—R. 1834, 11-15; 1862, 23-25; 1865, 29-30; 1866, 39.

Signs the Best Means of Development—R. 1832, 45-46; 1845, 30-37; 1861, 27-32; 1866, 36-38. H. 1867, Dec., 281-283.

Elements and Syntax of Signs—R. 1838, 16-31; 1845, 31-37. C. 1851, 193-200 = A. 1853, Jan., 83-95. C. 1856, 143-150. H. 1868, Feb., 61-64; March, 108-112.

Arbitrary Signs—C. 1858, 193-194, 208, 254.

Dictionary of Signs—C. 1858, 208.

Methodical Signs—R. 1833, 25-30; 1834, 9-10; 1838, 34-36. C. 1851, 92-94, 101-102; 1853, 67; 1856, 150-151.

Discussion with Mr. Jacobs—A. 1858, (April, 65-70;) July, 128-136; (Oct., 219-227;) 1859, Jan., 1-7; (April, 65-78;) July, 129-142; (Oct., 217-219.)

Dactylology—C. 1856, 122-125.

Age of Admission—R. 1855, 28-32; 1860, 10.

Previous Home Education—R. 1845, 29-42.

Course in Verbal Language—R. 1833, 13-16, 22-25; 1834, 11-33; 1835, 9-30. C. 1851, 38-62; 1853, 46-62, 72, 141-143; 1868, 19-26. H. 1867, Dec., 283. Notes to Course of Instruction, Parts I, II, III.

Discussion with Dr. Turner—A. 1849, (Jan., 97-105;) April, 164-176; (July, 217-232;) 1851, Jan., 92-120; (April, 181-190;) 1852, April, 137-154.

Higher Branches—C. 1851, 29-31. Special Report, 1852. R. 1855, 24-26.

Moral and Religious Education—R. 1842, 12-22; 1866, 38-39. C. 1870, 36-37.

Mechanical Education—C. 1858, 156-161.

Qualifications of a Teacher—R. 1832, 17-19; 1833, 11-13. C. 1853, 152, 187-194; 1856, 143, 147-149, 178; 1858, 255-256.

Duties and Qualifications of a Principal—A. 1860, Oct., 197-205.

Organization—R. 1832, 39-43. C. 1856, 199-202, 209-211, 225-226; 1858, 359; 1870, 157-158.

Indigency Requirement—R. 1853, 175-182. C. 1858, 371.

Compulsory Education—R. 1850, 13-15. C. 1870, 262.

Legal Rights and Responsibilities—C. 1856, 14-121 = Pamphlet = Am. Jour. Insanity. H. 1868, May, 220-224; June, 254-255; July, 12-16; Sept., 110-112.

History—First Period—R. 1839, 8-20. C. 1850, 99-141 = A. 1851, April, 129-160; July, 200-211.

Second Period—C. 1858, 277-341.

Recent Progress—C. 1870, 226-231 = A. 1870, Oct., 209-215.

Present Systems—H. 1867, Nov., 228-230.

Analyses—Bonet, A. 1851, July, 200-211. De l'Epée, C. 1858, 286-9. Sicard, *Ib.*, 319-328. Cook, R. 1851, 347-349 = European Tour. Lenoir, *Ib.*, App. D, 274-276. Pélissier, *Ib.*, 276-277. Pendola, *Ib.*, App. F, 281-295.

Depository of Books—C. 1856, 126.

Obituaries—T. H. Gallaudet, R. 1851, 71-82 = A. 1852, Jan., 65-77. N. M. Totten, A. 1852, Oct., 37-41. J. A. Cary, *Ib.*, 48-52. Miss Dudley, A. 1853, Jan., 78-83. L. Clerc, J. A. Jacobs, A. B. Hutton, G. Hutton, C. 1870, 166, 167, 168, 169 = A. 1870, Oct., 245, 246, 247; 1871, Jan., 49.

THE ELEMENTS OF HUMAN SPEECH, AS APPLIED TO THE INSTRUCTION OF DEAF-MUTES IN ARTICULATION.

BY JOHN PHILLIPS, TORONTO, ONTARIO.

WE propose, in the first place, to try and explain what the elements of human speech are; and, secondly, to illustrate what we believe to be the best method of teaching deaf-mutes to make these elementary sounds, and combine them into syllables and words.

By the term *speech* we mean the expression of the thoughts by means of the voice, modified in its passage from the larynx to the outer air by the vocal organs, at the will of the speaker.

By the *elements* of human speech we mean those changes perceptible to the ear which the sound of the voice undergoes as it passes on, and of which all the syllables and words of a language are composed.

The *prime* element of speech and song is produced by the vibration of the *chordæ vocales*, or vocal chords, set in motion by a stream of air passing from the lungs.

During the ordinary process of breathing these chords lie loosely, and incline toward each other at an acute angle. But by an effort of the will, as in speaking, and by the aid of certain muscles, they become extended and placed parallel to each other. In this position they are set in motion by the passing air and vibrate rapidly, making a noise, sound, or tone in the larynx.

This tone, as it passes on and escapes through the mouth or nose, becomes affected, varied, and modified by the glottis, palate, tongue, teeth, and lips, commonly called the organs of speech; and certain of these modifications are what we call the phonetic elements of any given language, or, in a wider sense, the elements of human speech.

Though the absolute number of sounds in any language may be said to be equal to the number of words in that language, yet the number of *elementary* sounds of which all the separate words of a language are composed is very limited; and on the printed page each is, or ought to be, represented by a separate symbol or letter.

The phonetic elements or elementary sounds of the English language are forty in number, according to Latham and Fowler, the most reliable authorities in England and America, and every Anglicized word in the language is made up of one or more of these sounds. They are divided into vocalic, or voice, and consonantal, or articulate sounds, and are produced, the former, by allowing the stream of air conveying the sound to pass uninterruptedly through the mouth; the latter, by checking the breath, and consequently the passing sound, by bringing certain parts of the mouth into contact.

Though the number of vocalic sounds we have the power of emitting is unlimited, yet a certain few are always agreed upon as *the* vowels of any particular language. In English we have twelve of these sounds, represented by only five letters; a striking illustration of how extremely deficient

our alphabet is! So deficient, indeed, is it, that the forty primary sounds of our language have practically to be represented by twenty-three letters, our *c*, *q*, and *x* being redundant, in so far as sound is concerned.

Let us now examine the different sounds of our vowels, and account for them.

What causes the difference of sound or tone of *a* in *father*, in *fall*, and in *fate*; of *e* in *mete*, *o* in *note*, and *u* in *rule*, so perceptible to the ear?

How could we explain them in writing to a person at a distance, unacquainted with any of them? How could we illustrate them with our own organs of speech to a person whose closed ears were never penetrated by a wave of sound?

On analyzing the different vocalic sounds and their modes of production, we find they are formed and perfected in different parts of the mouth. The grave or Italian sound of *a* in *father*, the most natural of all voice sounds—the sound emitted by the infant on first breathing the breath of life; the sound, the different modifications of which are emitted by so many species of animals, and the sound which justly takes precedence of all others in leading off the alphabets of so many different languages—is formed in, or emitted from the throat, with the mouth moderately open.

That of *a* in *ball* reaches up to the root of the tongue, and is sounded with the mouth wide open; while that of *a* in *fate* is collected in, and emitted from, the back part of the mouth.

The squeezed sound of *e* in *mete* or *ee* in *feet* is formed in the middle of the mouth, by pressing the central top part of the tongue as closely as possible to the roof of the mouth without touching it, and forcing the breath between.

The name sound of *i*, and its long sound, as in *pine*, we have to discard altogether as a simple elementary sound, and classify as a double vowel or diphthong. Its short sound in such words as *pit* is in reality the short sound of *e* in *mete*.

The sound of *o* in *note* is collected, not in the throat, the

back or middle of the mouth, but in the front part, just inside the lips.

The sound of *u* in *rule*, which is identical with that of *oo* in *pool*, is made between the lips, on protruding them; whilst that of *w*, very properly named in this respect, is produced by protruding the lips still farther, and nearly closing the circular aperture between them.

Thus we see that the peculiar tone of each vowel depends on the part of the mouth from which it proceeds, or the length of the buccal tube through which it is sounded.

The present name of our *u*, and its sound in *cube*, *tube*, etc., we have to classify as diphthongal. It originated in this manner: after the Norman conquest, our Anglo-Saxon progenitors, finding the close Norman *u* difficult for Saxon tongues to pronounce, preferred their own open sound of the letter. The proud Normans, on the other hand, disdaining to adopt the language of their conquered serfs, totally ignored the Anglo-Saxon *u*. Things went on in this way until the transition period of our language, when they compromised the matter by combining both into the diphthong *e-u*, or *u*, and thus transmitted to us in perpetuity a compound, instead of a simple or elementary vowel sound.

In treating of the sounds of the consonants, all we can do at present, without extending this paper far beyond its assigned limits, is to give the organic production of a few of them.

Consonantal sounds are those which do not coalesce into syllables and words except when joined to vocalic sounds, and pronounced with them. The former, however, can be isolated from the latter, and analyzed.

B, the first consonant and second letter of our alphabet, is sounded by closing or bringing the lips together, and then forcing them apart by the breath, or exploding the voice sound between them. If we close the lips, and, while keeping them together, try to give the name of the letter *b*, we recognize a sound, or something approximating to a sound, in the larynx. Whilst this is struggling to escape, if the breath forces the lips apart, the escaping air conveys the sound of this letter along with it.

The sound of *p* is produced organically in the same manner as that of *b*, with this difference: that while keeping the lips closed and attempting to give the sound or name of *p*, no hum or struggling sound is heard in the larynx. The breath barely presses against the lips and interior of the mouth, and on its explosion conveys the sound of this letter.

The sound of *b* is said to be sonant, because the *voice* is an indispensable element in its production. The sound of *p*, on the other hand, is called surd, because there is no voice sound used in producing it. In sounding *b*, the vocal chords are set in motion; in sounding *p*, they lie quiescent, as in ordinary breathing. Their whisper sounds are identical. If we pronounce the words *bill* and *pill* successively, both in the lowest audible whisper, the one cannot be distinguished from the other, and the only way they can be known apart is by their connection, as, *the bill is paid; the pill is swallowed*. The sounds of both are said to be explosive, because we cannot dwell upon or prolong them, as we can those of *l*, *m*, or *n*.

These two are the only pure labial or lip sounds in the language, and their representative letters have each but one sound, though in a few words each is silent, as in *psalm* and *dumb*.

M is a labial-nasal. It is formed by closing the lips and forcing the voice sound through the nose. Several species of animals utter this sound. The cow, calf, deer, sheep, and goat give it as plainly as any human being. They often give it alone, without parting the lips and giving the vocalic sound after it.

Some grammarians say consonantal sounds are peculiar to man, and that animals utter vowel sounds only. This is a mistake.

L is produced by placing the tip of the tongue against the roof the mouth, near the front teeth, and letting the sound and breath escape through the mouth.

N is a palatal-nasal, formed by placing the tongue against the palate, stopping the passage of the breath through the

mouth, and forcing it and the voice sound through the nose, with the mouth open.

The sibilant *s* is formed by placing the tongue forward in the mouth and hissing the breath out between the front teeth, with the mouth nearly closed, but the lips apart. The other sibilant, *z*, is produced in the same way, with this difference: the voice enters into the composition of the latter sound. The *s* is surd, the *z* sonant. The same relation exists between them as between *p* and *b*. From this it is evident there can be no more organic difficulty in sounding *s* than *z*, the testimony of foreigners to the contrary notwithstanding. Indeed, the difference is in favor of the *s*, as may be seen in comparing the *s* in *seal* with the *z* in *zeal*, the latter being the more complicated, as more organs are requisite to pronounce it; yet a German finds no difficulty in pronouncing the latter word, but finds considerable in sounding the former correctly, and for this reason: in German, the *s* is sonant and the *z* surd—just the opposite of English. The Germans sound *s* nearly as we do *z*, the voice sound not being quite so strong; therefore a German, in speaking English, pronounces *seal* nearly as we do *zeal*, and complains that our letter *s* is so hard to sound! The *z* in German is a compound sound, represented in English by the letters *ts*. The German word *Zelt*, for example, is pronounced in German as if written *tselt* in English. Who will argue that our English word *Celt*, which we pronounce as if spelled *selt*, would be more easily pronounced if spelled *tselt*? In short, be it well understood that, organically, the sibilants *s* and *z* are more easily pronounced or sounded in English than in German, and, consequently, are sounded with greater facility by Englishmen in English than by Germans in German.

The sound of *th* is an elementary one, though represented in modern English by two letters. It has, properly speaking, two sounds, being surd in *thick*, *length*, etc., and sonant in *the*, *this*, etc. In Anglo-Saxon, the surd sound was represented by one letter and the sonant by another, both of which, unfortunately, afterwards fell into disuse. The surd

sound is made by placing the tip of the tongue against the upper front teeth and forcing the breath between; the sonant, by forcing the voice sound out along with the breath.

There is no organic difficulty whatever in pronouncing either of these sounds. They are, at least, quite as easily made as those of the sibilants. Yet what a hindrance are they to Frenchmen and Germans in learning to speak our language correctly, because they have no sound approximating to either in their own languages. When surd, they give it the sound of *t*, as *tick* and *pat* for *thick* and *path*; when sonant, that of *d*, as *den* and *dat* for *then* and *that*.

These few remarks are all we can now make on our consonantal sounds. We have had to be very brief, and refer to only a few of the elementary sounds of our language, either surd or sonant, vocalic or articulate.

We are now prepared to take up the second part of our subject, and explain what we believe to be the best method of teaching deaf-mutes, and more especially *semi-mutes*, to produce or make these elementary sounds, and combine them into syllables and words—that is, to speak as other people do. In doing so, we shall sketch barely an outline map, leaving details to be filled in as the ground is gone over.

The first thing to be effected is to get the pupil to make a noise or sound in the larynx, by setting the vocal chords in motion. All teachers of any experience know how to begin here. When the pupil can make this sound voluntarily in a conversational tone of voice, without putting the hand to the throat, the first step has been made in advance.

This sound, as already stated, is the prime element of speech and song in man. And though we never expect to evolve song out of this rude element under existing circumstances, yet to develop it into speech is our reasonable expectation.

As good a way as any to go about this is first to convert it into vocalic sounds. For this purpose we take one of our pupils and seat him in front of us; then, opening our mouth, we give successively the sounds of *a* in *father*, *a* in *fate*, *e*, *o*, and *u* in *rule*, directing at the same time the pu-

pil's attention to the different positions of the mouth as the sounds one after the other are given. After pointing to the letters, and giving their sounds over and over again, the pupil is directed to open his mouth and try to do the same. In trying to get his pupils to follow his directions, each teacher is thrown almost entirely upon his own resources. The signs and motions that one pupil will understand will often be incomprehensible to another. One method or expedient, which we have found to be an excellent one,* is to take a short tube of some sort, and explain to the pupil by some means that in sounding the vowels the mouth is shaped into tubes of various lengths. That the sound of *a* in *father* proceeds from the extreme back part of the mouth; *a* in *fate* from the end of a short tube extending above the root of the tongue; *e* from one extending to the middle of the mouth and terminating at the top of the tongue pressed close to the roof of the mouth, but not touching it; *o* from a wide tube the whole length of the mouth; and *u* (in *rule*) from a long narrow tube not only the full length of the mouth but extended to the middle of the lips, protruded in the shape of a funnel. So soon as the pupil succeeds in sounding any of the vowels, we signify our assent, and point to the letter; then make him sound it again and again until the position of the mouth is fixed in his memory. When he sounds another we do the same, and indicate to him that it issues from a position in the mouth either backward or forward of the other one, and so on until these five vowels are mastered.

We now turn to the consonants, paying no attention to the other vocalic sounds for the present. We begin with the cognate consonants. We take *p* and *b* for instance. The sound of *p*, if it can be called a sound, is very easily given, being barely a puff of the breath between the lips; then, in giving *b*, we place the pupil's hand upon our throat, just above the projection of the thyroid cartilage, where he feels the thrill caused by the vibration of the vocal chords, and at once comprehends that the voice sound is indispensable in giving the sound of this letter, but has nothing to

do in giving that of *p*; and that this is the only difference in their organic production. In the same manner we proceed with *t* and *d*, *k* and *g*, *f* and *v*, *s* and *z*.

We may next take all the letters of the alphabet in rotation. The pupil will recognize the fourteen already known to him as old acquaintances, and the twelve strangers can be introduced one by one. When this is done, the pupil may be said to have advanced a second step or stage in his course of instruction, although there are many elementary sounds he cannot yet articulate.

We now begin to exercise our pupils in combining all the consonantal sounds they have learned with each of the five vocalic sounds at first acquired, as :

bä, bā, be, bo, bu,
dä, dā, de, do, du, etc.

Then place the vowels first, as :

ām, ām, em, om, um, etc.

There are a few sounds which will not coalesce, as *aq*, *eq*, *xa*, *xe*, etc., which of course must be omitted.

For these exercises we strongly recommend the old-fashioned spelling-books containing the "abs," as they used to be called, or cards with the "abs" printed on them in all their combinations. These exercises serve the double purpose of combining two elementary sounds into one, and fixing the sounds of the letters or their organic productions in the memories of the pupils.

While these exercises are going on, the remainder of the forty elementary sounds may be mastered one by one, viz : *a* in *all*, *th* in *thin* and *then*, *ng* in *song*, etc. When these exercises are completed and all the elementary sounds acquired, the pupils will have advanced another stage.

Now comes our first, or if not our first, certainly our greatest real difficulty : we have now to make our pupils combine three or more simple sounds into one compound ; in short, to combine sounds into syllables and monosyllabic words—the most difficult task to be accomplished in the whole course of deaf-mute instruction in articulation. Such,

at least, has been our experience. After the sounds of the letters are acquired it is easy to get deaf-mutes to combine two sounds into one, as in *ba*, *be*, *bo*, *bu*. But when we come to add another sound or letter, as *bad*, *bet*, *bon*, *bus*, they pronounce them *bad-da*, *bet-ta*, *bon-na*, *bus-sa*; and it is all but impossible to make them drop this additional syllable at the end of each. The reason is this: when an ordinary person says *but*, for instance, the very instant the tip of the tongue touches the roof of the mouth, makes the *t* sound, and completes the word, that instant the vocal chords stop vibrating and the voice sound ceases. To be sure, it may cease only for an instant, yet it *ceases*. But the deaf-mute prolongs the sound until after the tongue is detached again from the roof of the mouth, consequently he says not *but*, merely; he says, *but-ta*. Placing the tongue against the roof of the mouth and checking the breath in saying *but*, has a tendency to stop the voice sound; and the pupil must be trained *not* to continue the sound with the escaping breath on the removal of the tongue. Again, it is often less difficult to break a deaf-mute from saying *but-ta* than *man-na*, because the tongue in the *t* sound checks the breath and sound for an instant, whereas in the *n* sound it only changes the course of the breath and sound from the mouth to the nose.

This defect in articulation has to be remedied before a pupil can be advanced a step further. While a pupil says *man-na* for *man* it would be futile to put him on to words of two or more syllables, or to join short words in the form of sentences. If we try to make him say, *Man is mortal*, he will say, *Man-na is-sa mor-a-tal-la*, and will drawl it out in such an unnatural tone of voice as will be distressing to listen to. Unless he can be broken of this, it is far better to waste no more time in trying to teach him to speak.

But how this defect can be remedied is a question more readily asked than answered. We suggest: write down the word *man-na* just as the pupil pronounces it, and show it to him, comparing it with the word *man* as it ought to be pronounced. Let him see "what his mouth is doing," as

Mr. Bell aptly expresses it. Then make him speak it quickly ; do not give him his own time to drawl it out and supplement it with the *na*. Make him utter *man* in a short, explosive sort of shout ; and when that is said, do not give him time to put his suffix at the end of it, but raise your hand, or clap your open palm to his mouth and keep back the *na*.

Making the pupil explode his syllables at once will have many desirable effects. It will throw life and spirit into his manner and tone of voice ; it will check that mechanical drawl in his speech, so tedious to him and distressing to the ear of the listener, and, with the aid of dozens of other expedients which the ingenious teacher may devise, will in time remedy the defect we are speaking of, in the majority of instances.

All deaf-mutes that surmount this last difficulty will have smooth sailing beyond. *They* can be taught to *speak*. By this we mean they can be taught to articulate a sufficient number of words to express their ideas and make known their wants. Their vocabulary can be extended to that of a child of five or six years, and will chiefly consist of words of Anglo-Saxon origin, easily pronounced, and not containing many silent letters. Difficult words of classic origin, or what children call hard words, we need hardly expect many of them to make much progress in articulating, though of course we may meet now and then an exceptional case.

We feel called upon in this communication to express our opinion of Mr. Bell's system of "Visible Speech as a means of communicating articulation to deaf-mutes."

Were we to consult our own feelings at present we should say nothing on the subject, but should leave it to time and experience to sanction or set aside that system. Having, however, expressed our opinion of it upwards of a year ago, and that opinion being adverse to the system, we are now reasonably expected to reassert or retract it ; and as our opinion is yet unchanged, all we can do is to state it again, in substance, as briefly as possible.

We have no faith in "Visible Speech as a means of com-

municating articulation to deaf-mutes," as treated by Mr. A. G. Bell in the *Annals*,* because it is inapplicable to the purpose; because neither the system nor any symbol of it has ever yet been the "means" of communicating the articulation of a single elementary sound to any deaf-mute, or ever can be; because deaf-mutes have to learn to articulate before they can understand the symbols or alphabet of "Visible Speech," or the "deep meaning underlying" these symbols; because, in short, Mr. Bell "puts the cart before the horse," for it is articulation that is the means of communicating "Visible Speech" to deaf-mutes.

Indeed, we are thoroughly convinced that instead of "Visible Speech" being a help in teaching deaf-mutes to articulate, it is a great hindrance; and that, however successful Mr. Bell may be in his laudable endeavors, he would be much more so if he could resolve on throwing his "Visible Speech" to the winds, and substituting the letters of the alphabet as the representatives of primitive sounds, deficient as they are in number.

That we are correct, we think will be evident from the following considerations.

In teaching an ordinary child the alphabet, we point to each letter and name it, the child naming it after us. In commencing to teach a deaf-mute to speak, we point to each letter and give its *sound*; but as the mute cannot hear, we have to show him how the sound is made.

As an example of the manner in which a deaf-mute is taught to articulate a particular sound, let us take that represented by the letter *m*, and compare the ordinary method with that of Mr. Bell. The teacher, after pointing out the letter, closes his lips in the presence of the pupil, and placing one of the deaf-mute's hands upon his (the teacher's) throat, and the other upon his nose, sets the vocal chords in motion, and this produces the nasal hum, the peculiar sound of this letter. Whilst the teacher continues to prolong the sound, the pupil feels the thrill caused by the vibration of the vocal chords in the larynx with the one hand,

* Vol. xvii, p. 1.

and the thrill at the sides of the nose and the escaping breath with the other. After the repetition of this a few times until the mute understands to what his attention is being directed, he is motioned by his teacher to close his own lips, place one of his hands upon his own throat, and the other upon his nose; and if he succeeds in making the thrills in his own throat and nose, he has the required sound, for no one can produce these thrills with closed lips without making the sound represented by the letter *m*. At first, the pupil may make some very awkward motions in trying to imitate his teacher. He may make a disagreeable gurgling noise in the throat, or expel the breath too forcibly from the nose, but under the direction of his teacher he soon gets over this, and after making the real sound a few times and finding how easily it is done, he becomes encouraged. After repeating it for a few days or weeks in succession along with other sounds, and especially after combining it with the vowel sounds previously acquired, he will never forget it. He will sound it *instantaneously* on the letter being pointed out to him, without waiting to think *how* the organs of speech are to be placed, and with as little hesitation as an ordinary child gives its name.

This is the method we followed before ever hearing of "Visible Speech." This was the method followed in Germany before we were born.

Now for Mr. Bell's method. Instead of taking the letter *m* as the representative of this sound, he introduces his symbol. He represents this simple sound by a compound character, consisting of four elementary parts, or *simple* characters. These simple characters are straight and curved lines, arbitrary representatives of the under lip, the nose, the sound of the voice, and the verb *to shut*. These four elementary signs, combined in a certain manner into a compound symbol, represent the sound of *m*, and when explained, mean "lip, shut, voice, nose," or, "Shut the lips, and pass the voice sound through the nose."

This symbol, and all its parts, Mr. Bell now explains in full to his pupils. Well, of course they all at once shut the

lips, pass the voice, and give the sound of the letter *m*? Oh, no; not at all! What then? Why, Mr. Bell just takes his pupils one by one, and goes through the very same *modus operandi* we have just been describing!!

Not one of his pupils even understands the symbol, or knows anything about the "deep meaning underlying it," until he has learned the organic production of the sound that symbol represents; nor then either, in all cases, we are inclined to believe.

Unless we look upon Mr. Bell as an enthusiast, it is inexplicable to us that, after going the rounds we have indicated in teaching a deaf-mute the organic production of an elementary sound, he attributes his success in making him produce that sound to one of those symbols of "Visible Speech."

In conclusion, we freely confess that all the information we have had in regard to "Visible Speech" as a means of instructing deaf-mutes is contained in the article mentioned, and if we misrepresent the utility of that system we do so involuntarily. That article is written in such plain, unequivocal language, that we do not think it possible we can be mistaken.

If at any future time we find we are in error in regard to the system, we shall take great pleasure in acknowledging it.

We believe that, whether "Visible Speech" is a help or a hindrance, Mr. Bell has done good service in pressing the question of articulation on the attention of the educators of the deaf and dumb, and that the time is gone by when a child who loses his hearing after learning to speak must necessarily lose his speech also.

SOCIETIES AND PERIODICALS FOR THE DEAF.

BY HENRY WINTER SYLE, M. A., NEW YORK.

ONE of the most encouraging signs of progress in our profession is the increasing possibility of testing proposed improvements in methods, arising partly from more adequate means, but partly also from greater readiness to admit that our past practice has not been perfect.

Among the arguments adduced to support the last proposition is one pointing to the behavior of the mass of educated deaf-mutes, as showing that they have not been fitted to mix on equal terms in general society, and have not been inspired with the desire for such equality. This surely is legitimate argument, though possibly it proves more than was intended. If the fruit be poor, the fault must be in the tree, the soil, or the husbandman. If deaf-mutes who have passed through the usual training are not sufficiently familiar with the English language to employ it habitually as a means of intercourse, and to rely upon it as the channel of information; if, as naturally follows, they prefer the society of other deaf-mutes, with whom they can talk freely by signs; and if, as is asserted, their thoughts are thus limited to a narrow range of trivial subjects—then surely they are suffering under a very grave disability; and it is incumbent upon us to ascertain its cause. This must be in their infirmity of deafness, or in the character of their training, or both. If the former alone, man can by no arts break down the barrier raised by the Creator. If the latter alone, or if both combined, the disability can be removed by modifying the system. But before the system can be modified, we must determine clearly in what its characteristics consist. Are signs its peculiar excellence, as maintained by Dr. H. P. Peet and Mr. Keep, or an incidental though necessary evil, as asserted by Dr. E. M. Gallaudet? Is the aggregation of large numbers, denounced by Dr. S. G. Howe and upheld by Rev. Collins Stone, an essential? The co-education of the sexes, the deferring the term of in-

struction until childhood is past, its extension to end with an academic degree—are these intrinsic or accidental?

But, again, is it so certain that the “symptoms of clanishness” complained of—social conventions of deaf-mutes, associations of various kinds among them, periodicals published expressly for their reading—are really evidences of undue narrowness, and in themselves injurious to their best interests?

We * rank President Gallaudet high among the men to whom honor and gratitude are due for what they have performed themselves, and for their influence in arousing powers latent in others. His honesty of purpose and whole-souled earnestness are beyond all question; his judgment we regard with respect. There is much in his article on “Deaf-Mute Conventions,” etc., in the *Annals* for July last, with which we heartily agree, and which we rejoiced to see so emphatically uttered. Yet we think he injured his cause by what we cannot but consider exaggerations—which, however, but attest his earnestness—and we are constrained to dissent from his sweeping condemnation.

The stated conventions of deaf-mutes have, to our mind, done no good at all commensurate with their expense and other undesirable concomitants; though we never heard of any of their frequenters “living in solitude more or less complete through the year, reserving his social energies for the one grand reception or convention when he might mingle freely with his ‘clan.’” Somewhat of their purposeless character would indeed be removed were they made reunions of the alumni of an institution.†

But it is very doubtful if an association, depending for its strength upon holding conventions in different districts in turn, would consent to their becoming permanently localized; we doubt, too, whether even the “ægis of Alma

*One reason why the plural pronoun is used in this paper is that the writer knows he is expressing the sentiments of many others.

†Such a proposal was made as long ago as 1862 by the writer of this article with regard to the New England Association, and cordially endorsed by Dr. W. W. Turner, Mr. D. E. Bartlett, and other leading gentlemen.

Mater " would overawe the " lewd fellows of the baser sort," whose excesses—the more conspicuous from the general propriety of demeanor, it must be said—have disgraced some of these assemblages; the more that most of our institutions are in or very near large cities. Moreover, one great attraction of college alumni meetings would be wanting, from the different relation sustained by deaf-mutes to their mother institution. Measures for its benefit, to be executed by themselves, might indeed be concerted; but the trustees of an institution are never themselves graduates thereof; and so far from their being likely to heed representations made by former pupils, there are on record in the proceedings of the conventions of instructors bitter complaints that the officers, and even the principal, were often not heeded nor even consulted.

Some associations exist only for the purpose of holding these biennial reunions, and require no further notice. Of those confined to one locality, we notice with pain that some have become a byword from the striking contrast between their religious objects and their incessant clashing with neighboring bodies and internal dissensions. But there are other societies not merely not open to reproach, but deserving of hearty approval and liberal support.

President Gallaudet says truly that the deaf are debarred from participating in the benefits of many organizations among the hearing. One of the most important of these, the Masonic order, is understood to exclude them forever and beyond appeal by a construction of one of its "landmarks," as not being "perfect men;" and life-insurance companies are very slow in relinquishing their prejudice against them, a prejudice ascribed in great measure to ill-founded representations of their greatly inferior longevity made by instructors.

A society of deaf-mutes for mutual enjoyment, improvement, and pecuniary aid, has at least as much *raison d'être* as any of the innumerable similar societies of hearing persons.

The deaf are drawn together by their common infirmity

and common training, and consequent common disabilities and tastes. They value the good opinion and advice of former schoolmates and teachers higher than those of persons who cannot fully appreciate and sympathize with their peculiar circumstances, and apply to them more readily and unreservedly, even when at a distance, for counsel and assistance. In return, they are predisposed to give other deaf-mutes a hearty welcome, and substantial aid and comfort. Let a deaf man arrive in a strange city, or even a foreign country, and he is very sure speedily to find or be found by the deaf-mutes there.

Here we have ready to our hand a powerful instrument of influence. Rightly used, we believe it can be made so effective for good as far to overbalance the possible evils of "clannishness," and even by its elevating and invigorating power to do away with them. To put it by would be a crime.

We therefore wish all prosperity to the well-managed literary associations existing in some of our great cities, and trust they will be multiplied.

There is an organization of far wider scope and higher aims—we refer to the E. S. Society. Though yet in its infancy, this society extends all over the United States, and has done, though quietly and almost unperceived, a great amount of good. Its beneficial influence has not been limited to its members; and as their number and its field have enlarged, its capacity for usefulness has developed beyond all expectation. Its rapid growth has necessitated successive remodellings; and as the process is not yet complete, and may involve a change in the name itself, we refrain for the present from going into further detail thus publicly, but shall be happy to afford any of our readers information sought by private correspondence.

We heartily agree with what President Gallaudet says of the great benefit to deaf-mutes in using the libraries and reading-rooms to be found in all our large towns, and of taking periodicals of the better class; and have long been in the habit of impressing it upon our pupils and acquaint-

ances. But before a man can profit by the best book, the most entertaining and informing periodical, he must be able to read it.

Are the average of our former pupils able to read intelligently and with pleasure the books and papers ordinarily current?

The British instructors lament the short time they are able to keep children at school, and look with envy on the liberal term allowed by legislative enactment in this favored land. Yet the average time we keep pupils is only about the same.

Said the good De l'Épée: "If our readers should be surprised at the meanness of our exemplifications, I entreat them to call to mind that those whom we are instructing are deaf and dumb." If the president of the National Deaf-Mute College is surprised at "the too low average capacity of the educated (?) deaf-mute," we entreat him to call to mind that those whom we instruct remain with us only four or five years.

Whatever improvement better methods and compulsory attendance may bring, there is the fact that the great mass of our former pupils, and the great majority of those who will leave us for some time to come, are and will always be unable to read understandingly ordinary books and newspapers. The language is not the sole difficulty; one hardly less serious is in the allusions which presuppose an amount of general information entirely beyond our five-year graduates.

To the end of time there will be at all periods under instruction large classes not sufficiently advanced for ordinary reading. Children will take far more readily to voluntary exertions than to set tasks. There is no teacher of experience but must have observed what rapid and steady improvement in the use of language came of a pupil's interest being excited in any subject, sufficiently to set him to reading about it by himself. But few will take up a special subject, while all are attracted by current news and items of various kinds.

As a purely educational measure, therefore, there is urgent need of periodicals prepared expressly for deaf-mutes of low attainments, giving the news of the day, and a variety of miscellaneous information in short articles carefully selected—or, as will generally be necessary, re-written—with special attention to ease and simplicity of wording and judicious introduction of colloquial phrases. But such a paper would also have a wide circulation among graduates.

It is only at an institution, moreover, that men can be found qualified for the editorial charge of such a periodical, and willing to undertake the labor. Its publication at one also affords a uniform supply of “copy” for a printing office otherwise not easy to obtain; and the trade of printing is so desirable for the deaf that its introduction and maintenance should be encouraged by all reasonable means.

The *Chronicle*, published at the Ohio Institution, and *Now and Then*, which has lately appeared at the New York Institution, are examples of what we mean. The typographical appearance of both is excellent, especially considering the difficulties to be surmounted. We must mention, also, though it is not published at an institution, the *Magazine intended chiefly for the Deaf and Dumb*, edited by Rev. Samuel Smith, chaplain to the London Association in Aid of the Deaf and Dumb, a small quarto monthly, whose illustrations merit attention all the more that they are mainly both drawn and engraved by deaf-mute artists. Its reading matter, which is mainly religious, is excellent, and we hope to see a similar publication here for distribution on Sundays—a day which, do all we can, passes heavily with the majority of our pupils.

There are and have been not a few deaf-mute papers of a different character. While some of them have been fairly open to the objections President Gallaudet raises, particularly with regard to the amount of purely personal and often impertinent gossip and the obtrusive personality of the editor, there has been much to commend in even these. Articles have appeared in them from writers who but too seldom

contribute to the *Annals*, and well worthy of a place in its pages. We may be pardoned if we refer to the numbers of the *Guide* from January to July inclusive, 1862, of which we had in part the editorial charge, if only to repeat our obligations to the gentlemen of the profession who so kindly and ably assisted us.

This mention of the *Annals* naturally brings up President Gallaudet's proposal that it be made a monthly, and enlarged so as to admit a department of general reading for the imperfectly-educated deaf. The first suggestion we beg most cordially to second, as giving hope of contributions from many hard-working teachers, who, with modesty to which we can lay no claim, shrink from appearing in a dignified quarterly. To the second we must, however, demur. It would destroy the distinctive professional character of the *Annals*, while giving each class of readers a mass of matter of little interest to them; and a paper for general reading should, we think, be very different in size and style. The editor of the *Annals* will permit us to say we should esteem it fortunate for a paper for the deaf to be under his charge, but as an entirely distinct affair.

One more remark, and we are done. President Gallaudet deprecates most earnestly the intermarriage of deaf-mutes. It is not clear whether or not he includes under this term only the congenitally deaf; he doubtless is aware of the great difference between these and those in whom there was no ante-natal predisposition to deafness. But if any doubt that this tendency is in large measure a consequence of the present practice of co-education of the sexes—a practice, we may observe, gaining ground rather than losing among the hearing—let them listen to Plato, (*Republic*, book v:)

“*Socrates*. Now inasmuch as the dwellings and mess-tables are all common, both sexes will live together, and in consequence of their indiscriminate association in active exercises, and in the rest of their daily life, they will be led, I imagine, by a constraining instinct, to form alliances. Do you not think this will be inevitable?

“*Glaucon*. The necessity truly will not be that of mathematical demonstration, but that of love, which perhaps is more constraining than the other in its power to persuade and draw after it the mass of men.”

[NOTE.—Readers who desire to see further criticism of the positions of President Gallaudet's article are referred to the *Deaf-Mute Advance* of July 9 and 16, the *Silent World* of July 15 and August 15, and the *Deaf-Mute's Journal* of July 31. These criticisms, like the above, come from gentlemen who by reason of their own deafness feel a peculiar interest in the subject discussed; we are sorry that our space does not permit us to make some extracts.—ED. ANNALS.]

THE PERVERSITY OF DEAF-MUTISM.

BY AN EXTREMIST. NOWHERE.

THE American system of deaf-mute education is a failure. Tried by its own standards, it is condemned. Its object is “to restore the deaf-mute to society”—that is, to enable and encourage him to take an equal place in the society of hearing and speaking people. But in fact it only inspires him with a stronger and more exclusive affinity for other deaf-mutes. It strengthens the spirit of clannishness which leads him to seek their companionship, not for the passing moment merely, but for life, and to be interested in tidings of them and of what concerns them, not in occasional correspondence merely, but in broad sheets of small type devoted to such intelligence.

Such being the case, let us preserve our system, and reprobate the deaf-mute for exhibiting such tendencies as its consequences.

For is not our system perfect?

We bring deaf-mutes together from every part of a wide territory by the score and the hundred. Infants of six, young men and maidens of six-and-twenty, we herd them all in one building; we preach to them and pray at them all in one chapel; we feed them all in one dining-hall; we

provide each sex with its own study-room, but only one for each; we send them to sleep forty, eighty, an hundred and twenty in one dormitory; we subject all, young and old, to the same discipline, exemplifying the tender care of the elder brother and the elder sister in monitors armed with mark-books and arming themselves with broomsticks; we keep them under the same influences—only shifting them from class-room to class-room, it may be twenty times and it may be never—for ten months in the year and for from five to seventeen years at a stretch; we shield them from the contamination of other youths in a college of their own; and if they do well—we make them teachers and keep them in the same society till the end of their days.

We give them books carefully prepared so as to display in all their hideousness the dry bones of the English language. Solid page on solid page of sentences all in one tense; phrases so highly idiomatic one meets with them twice in a lifetime; lists of all the diseases flesh is heir to, from dandruff to a stubbed toe—these form their idea of English. But English is sacredly confined to the class-room and the text-books. When we wish to amuse, to instruct, to reprove, when we talk to them, when we talk to each other, we grimace and gesticulate and jump.

And yet after all our sedulous care, they obstinately persist in not understanding and not writing English, and shunning those who do; in talking in signs; in attending deaf-mute conventions, reading deaf-mute papers, and marrying deaf-mutes.

Surely this can only be utter perversity or original sin.

But if gregariousness be the result of aggregation, let us first pull the beam out of our own eyes, and then out of theirs the mote which is its splinter.

A DISGUSTED PEDAGOGUE.

INSTITUTION ITEMS.

BY THE EDITOR.

OUR enterprising friends, the editors and correspondents of the weekly and fortnightly deaf-mute newspapers, are accustomed to report institution items so fully and promptly that since they were established it has seemed rather superfluous to attempt a department of news in the *Annals*. The frequent appearance of these journals gives them so much the advantage over a quarterly periodical as a vehicle of news that we have feared any endeavor on our part to enter this field would result in the narration of tales which our readers would pass over as already more than twice-told. But there is no doubt that the large amount of news published in the deaf-mute papers will bear sifting somewhat, and it is represented to us by high authority that a brief and careful *résumé* in each number of the *Annals* of the more important events of the institution world will make a valuable addition to its contents. With thanks, therefore, to the correspondents who have furnished us with material for the following experiment in this direction, and the hope that our statements, if not wholly new, will at least be found entirely accurate, we proceed to lay before our readers a summary of the news from the institutions for the last quarter.

American Asylum.—Miss Bartlett and Miss Haskell have been obliged to resign their positions as teachers for the present on account of poor health, but hope to be able to return next year. Their places are supplied by Miss Wing and Miss Emerson, graduates of the high class of the institution.

During the summer the buildings have been painted outside, and the method of heating has been changed. The steam-heating apparatus of H. B. Smith & Co., of Westfield, Mass., has been substituted for the old hot-air furnaces, so that there are now five furnaces instead of ten. Ventilating boxes have been put into the school-rooms and chapel, and the ventilation elsewhere is improved. The term opened September 10 with a large number of new pupils.

New York Institution.—The following instructors have re-

tired from the institution and the profession : Messrs. Bernhard Engelsmann, Frank D. Clarke and William E. Clarke, Miss Bella H. Ransom and Miss Celia L. Ransom. Their places are supplied in part by the appointment of Messrs. E. Henry Currier, Pender W. Downing, and Edward B. Nelson, B. A., all hearing and speaking gentlemen. Mr. Downing is a son of the Rev. G. A. W. Downing, chaplain of the Manchester (England) society for the improvement of the deaf and dumb, and has been a teacher in the Liverpool and Halifax institutions. Mr. Nelson is a recent graduate of Harvard College ; having a deaf-mute brother and sister, he is familiar with the sign-language. Mr. Jenkins has been transferred to the articulation department to fill the place made vacant by Mr. Engelsmann's retirement.

The plan for the division of responsibility and labor in the intellectual and administrative departments of the institution has been perfected, and now works harmoniously and successfully. We observed in a recent visit to the institution that Dr. Peet and Dr. Porter found their time fully occupied each in his own field. Dr. Peet spends a large part of every day in the class-rooms, and conducts the religious exercises every morning during the week and on Sunday afternoon. Evening prayers are held in the study-rooms in the evening at 8 o'clock, instead of at the close of school as formerly, by the teachers in weekly rotation, the gentlemen officiating in the boys' study-rooms and the ladies in the girls'. On Sunday morning a few of the gentlemen alternate in lecturing.

Dr. Peet conducts his Sunday service in such a way as to give it variety, and enable the pupils to take part in it to some extent. At our request he has furnished us with the order of exercises usually followed, which we reproduce in the *Annals*, thinking some other institutions may like to try the same experiment, or something similar to it :

- "1st. The Lord's Prayer *in concert*. (pupils standing.)
- "2d. Reading of a hymn by signs. (pupils sitting.)
- "3d. The same hymn repeated *in concert*. (pupils standing.)
- "4th. Reading by the manual alphabet, and also by signs, of the first four of the Ten Commandments one Sunday, and the remaining six the next Sunday, (pupils sitting.)
- "5th. Prayer, (pupils standing.)
- "6th. Sermon, (pupils sitting.)
- "7th. Closing prayer and benediction. (pupils standing.)"

It is said that the pupils enter into this service with great

interest, and that the exercises in which they take part are very gracefully as well as intelligently performed.

Last year, in addition to the regular school exercises, lectures were given in signs to all the older pupils in a body on various scientific subjects. In some cases the lectures were delivered by instructors of the institution; in others by professional lecturers, Dr. Peet acting as interpreter. The same course will be pursued this year.

Mr. Syle has recently prepared an article on the deaf and dumb for the new edition of Appleton's American Cyclopædia, soon to be issued. He is at present engaged upon a list of publications relating to the deaf and dumb, and on a catalogue of the pupils of the New York Institution for the years 1854-'73, in continuation of that published in the sixth volume of the *Anna's*. The institution records, he tells us, throw very little light on the question of longevity, which is assuming much importance in connection with life insurance.

Pennsylvania Institution.—The board of directors are now earnestly looking for a site on which to erect a new and larger institution, the present accommodations falling far short of their requirements. Pennsylvania is rich enough, and we trust she will be wise enough, to build an institution which shall be in all respects a model of its kind.

Ohio Institution.—Miss Rosa O. Gildersleeve, Miss M. M. Noyes, and Miss Fannie Brown have resigned their situations as teachers. Miss Noyes goes as a missionary to China; Miss Brown becomes a teacher in the Illinois Institution. Miss Linnie Cross, Miss Sarah M. Perry, a sister of Mr. Perry, the instructor of the high class, and Mrs. J. Kessler, who has recently taught a kindergarten school in Chicago, have been appointed to supply the vacancies. This makes the corps of instruction stand fourteen ladies to seven gentlemen.

Mr. Fay intends to hold monthly social gatherings of the pupils during the year, and for this purpose divides the school into three divisions, which will alternate with one another, so that each company will assemble once a quarter. The preparation of our pupils for the social requirements of life is, or ought to be, an important part of the work that we do for them. The Ohio Institution seems to be taking hold of it in the right spirit.

Virginia Institution.—We have seen in several papers statements of removals and new appointments in this institution, but we have the highest authority for saying that no changes have yet been made, though there is reason to believe that some are contemplated.

Indiana Institution.—Mr. Chapin C. Foster, formerly connected with the institution, but for the past three years engaged in business in Indianapolis, was married July 16 to Miss Harriet N. MacIntire, oldest daughter of the superintendent, and a teacher in the institution. The many members of the profession, to the pleasure of whose visit to the institution during the seventh convention Miss MacIntire and Mr. Foster contributed so much, will join with us in congratulations and good wishes.

Mr. W. N. Burt, a teacher, was married September 2 to Miss Maggie J. Donnell, of Franklin, Ind.

Mr. Joseph C. Gordon has accepted an appointment as professor in the National Deaf-Mute College.

The main building has recently been painted a delicate cream color and marked off in imitation of stone, much improving its appearance. The shoe-shop has been enlarged and several new out-buildings have been erected.

North Carolina Institution.—Mr. Z. W. Haynes, a deaf-mute teacher, was married September 3 to Miss Louisa J. Bunker, a former pupil of the institution. Miss Bunker is a daughter of Chang, one of the famous Siamese twins. There are two other deaf and dumb children in the same family.

Wisconsin Institution.—Mr. E. G. Valentine's place as teacher is supplied by Miss Mary E. Smith, formerly of the Minnesota Institution.

Three of the pupils who were graduated last summer have entered the National College, making with former pupils eleven who have gone to the college from this institution.

Michigan Institution.—Miss S. C. Howard and Mr. Wm. H. Brennan have been succeeded as teachers by Miss Ida C. Pool and Miss Carrie Standart, who are both hearing and speaking young ladies. Mr. George L. Brockett, teacher of articulation, has resigned, and his place is not yet filled.

The institution now has a landscape gardener, who is engaged with a large corps of workmen in laying out the ample grounds of one hundred acres in a way that will be a credit to the institution and the State.

Iowa Institution.—Mr. J. A. Kennedy, a hearing and speaking gentleman, has succeeded Mr. J. C. Hummer as teacher, the latter having resigned on account of poor health. Mr. David S. Rogers, B. A., a graduate of the South Carolina Institution and the National College, has also been appointed teacher.

Columbia Institution.—President Gallaudet has returned from his long absence in Europe, and with health and vigor entirely restored and consecrated anew to the important work so successfully carried on hitherto, has resumed his place at the head of the institution and college.

Professor Porter has leave of absence and remains abroad until November 1.

Professor James M. Spencer, to the regret of his numerous friends in the college, has resigned his position, but will remain until after Professor Porter's return. His successor is Mr. Joseph C. Gordon, late of the Indiana Institution, who has already entered upon his new duties.

The college opens with a larger number of students than ever before, and the primary department has a few new pupils.

Alabama Institution.—A new matron has been appointed—Mrs. M. S. James, formerly of the Michigan and Mississippi Institutions. She is a cousin of Dr. Peet and a sister of Miss Meigs of the New York Institution.

The institution is in an embarrassed pecuniary condition, the treasury of the State being bankrupt and its warrants not being worth over seventy-five cents on the dollar. No money has been received since January last. Dr. Johnson and his assistants are struggling on to the best of their ability, keeping the school in good working order, and hoping for better days to come.

California Institution.—The malicious attempts made during the past few months to destroy public confidence in Mr. Wilkinson's administration and effect his removal have proved unsuccessful, and his personal character, as well as the wisdom

of his administration in its essential features, has been entirely vindicated. There have been three investigations following one another in quick succession—the first, public, by the board of directors, and resulting in the verdict that the charges made were without foundation: the second, private, by a committee of ladies, who questioned the female members of the household in a way that men could not, and came to the same conclusion: and finally, since neither of these sufficed to silence the clamor of Mr. Wilkinson's enemies, a third, by a committee which was appointed at Mr. Wilkinson's request by the governor of the State, and consisted of eminent citizens entirely unconnected with the institution.

The first and second investigations were very thorough; but the third, in the prosecution of which the committee were in session for many days, while they reviewed the whole seven years of Mr. Wilkinson's administration and heard the testimony of more than seventy witnesses, was probably the most searching that any institution of the kind ever received. Counsel were employed upon both sides, "hearsay" testimony was admitted, and the largest latitude was allowed. In this investigation the most scandalous of the accusations, which had been made public in a sensational newspaper of San Francisco, were abandoned, for the reason that no foundation whatever could be found for them; but every charge, grave or trivial, for which the least color of evidence could be shown, was pressed with the utmost virulence. The report of the committee, a long and carefully-prepared document, is before us. As was to be expected in such an examination as this, covering a period of seven years and entering into all the minutiae of institution life, the committee find some matters of detail which in their opinion might have been better administered, and make some suggestions which they think will result in benefit to the institution: but they acquit Mr. Wilkinson and his brother of the serious offences charged against them, and "express their conviction" (to quote their own words) "that the public may rest in full confidence that the affairs of the institution are in the main, and with such exceptions as they have noted, well and wisely conducted." They intimate that there would have been no occasion for these investigations but for "unfriendly influences from without. Under such influences the minds of the blind pupils have been unduly and unhealthfully excited, their feelings wrought up to a morbid acuteness, the quiet of their studies interrupted and

disordered, and trifling grievances made to seem to them an intolerable wrong."

The committee express the opinion that the education of the deaf and dumb and the blind in the same institution is unwise, on account of the entire dissimilarity of the methods of instruction of these two classes and the "inevitable feeling of jealousy on the part of the more sensitive class." Finally, the teachers are admonished to "more rigorous caution in reference to making such comments upon the management of the institution in the presence of pupils as shall tend to demoralize their feelings and disturb their tranquillity and discipline."

Mr. Wilkinson's acquittal under such circumstances is not so much a triumph for himself over his enemies as it is the triumph of good order and rightful authority over insubordination, intrigue, and sensationalism; it seems to us a matter of congratulation not only for the California Institution, but for all institutions of the kind throughout the country.

The vacancies in the corps of instruction have been filled by the appointment of Mr. Geo. B. Goodall, M. A., of Yale, and Mr. Foland P. Fowler, a graduate of the Wisconsin State Normal School. Mrs. H. B. Willard, for three years the efficient housekeeper, has assumed the matronship and the whole direction of domestic affairs.

St. Mary's Institution.—The method of "Visible Speech" has been introduced, some of the teachers having studied the system under Mr. A. G. Bell in Boston. Mr. Bell himself was expected to be present in September, and devote some time to the initiation of the new method.

Minnesota Institution.—The term opened with three new teachers: Mr. David H. Carroll, B. A., a graduate of the Ohio Institution and the National College, Miss Cora A. Howe, and Miss Ella C. Westgate. Mr. F. C. Sheldon has been appointed clerk and assistant steward.

A very important result, for which Mr. Noyes has labored long and earnestly, was reached in August in the purchase of a site for a blind institution, thus securing the separation of the two classes. We heartily congratulate the institution upon its escape for the future from the troubles which have always attended "dual" establishments. Probably the blind pupils will be removed to their new home during the present term, leaving

the deaf and dumb in sole possession of the buildings now occupied.

During the summer, the south wing of the building, designed for the boys, was finished, and it is now occupied. It is furnished in the most thorough manner with all things necessary and convenient for its purposes.

Nebraska Institution.—Miss Bickford and Miss Jenkins, teachers who were employed last year, do not return. Mr. McClure, a speaking gentleman, and Mr. F. L. De B. Reid, B. A., a graduate of the National College, have been employed to fill their places. Mr. McClure has never taught before, but he is acquainted with the sign-language, having a deaf-mute sister, the wife of Mr. Zorbaugh, of the Iowa Institution.

Pitts'nurgh Day-School.—The new building is not yet begun, on account of a coal railway company having entered the ground with the intention of constructing a road through the very centre of it, thus destroying it for the purposes of an institution. Dr. Brown has appealed to the courts and obtained an injunction restraining them from the further prosecution of their work. The company has appealed to the supreme court of the State, and it is expected that a final decision will be reached in the course of the present month. Should the decision be against the school, it will sue the company for damages in the hope of obtaining means sufficient for the purchase of another site.

Boston Day-School.—Miss Ellen L. Barton has resigned her position as teacher, and is succeeded by Miss Mary F. Bigelow. Miss Barton is engaged in Rochester, N. Y., in giving private instruction, by Professor Bell's method, to a daughter of Mr. Gilman C. Perkins, of that city. In May next she is going to England to teach the daughter of Mr. B. S. Ackers, whose visit to several American institutions last year will be remembered by some of our readers.

Ontario Institution.—Mr. Duncan J. McKillop, a deaf-mute gentleman, has been added to the corps of instructors. A new female hearing and speaking teacher will also be employed this term, but the selection has not yet been made. A teacher of some experience is desired.

The school opened September 3 with a large increase in the

number of pupils. During the summer an addition of thirty feet in length has been made to the dining-room, providing also two new class rooms on the next story. Other improvements are in progress. Ten pupils, receiving wages, have been employed in the carpenter and cabinet shop during the vacation. They have built a barn and other out-houses, besides making and repairing a large amount of furniture. Instructors have recently been appointed in the shoemaking and tailoring departments, and work has begun. Orders have already been received for five hundred pairs of brogans for the prison at Toronto, and two hundred pairs for the insane asylum at London. It is expected that when the shoe-shop is fully organized, most of the shoes for the several benevolent institutions in the Province will be made here.

The Report of the Ontario Institution did not reach us last summer until after our annual review of the institution reports for the July *Annals* had gone to press. Mr. Langmuir, the inspector, publishes a table showing that notwithstanding the rapid growth and prosperity of the institution, more than half of the deaf-mutes of the Province of suitable age are not under instruction. In addition to the causes prevailing elsewhere to keep deaf-mutes out of school, is the charge made in Ontario for the board of the pupils while receiving an education. In cases where the parents are not able to pay this, it is expected that provision will be made by the municipalities from which the pupils come; but as there is no means of enforcing this provision, the municipal corporations fail in many cases to carry it into execution. Mr. Langmuir recommends compulsory education, and entirely free instruction. He wisely remarks that *permissive* legislative enactments are not sufficient to accomplish the end desired. The law must be imperative, and accompanied with liberal appropriations. We notice in Dr. Palmer's report that much has been done to extend the influence of the institution by inviting to visit it all organizations who have chanced to hold conventions or annual meetings in the vicinity. In this way, and by visiting other counties with a few pupils, the existence and character of the institution are made known, and much interest is awakened, the good fruits of which are immediately evident.

Articulation has been taught to a class of thirteen semi-mutes for two hours a day with gratifying results. The Bell system is mentioned, but its introduction is not proposed until

it has been thoroughly tested elsewhere. "We are not prepared," says Dr. Palmer, "to enter the field of experiment. That is properly the work of older institutions, whose organization is complete. We shall continue the system of instruction almost universally used in American institutions for the deaf and dumb, until it shall be clearly proved that there is a better system. In the meantime we shall watch carefully the improvements made in the management of deaf-mute institutions, and introduce such changes as shall be calculated to advance the interests of those committed to our care."

Liverpool School.—The *Liverpool Daily Post* of May 29 contains an interesting description of the Liverpool School, from which we make the following extract:

"The day-scholars, who are the children of parents resident in Liverpool, receive their education and likewise their dinner free of charge; but, of course, those parents who prefer to board their children at the institution have to pay a certain sum, very moderate in amount, for board and lodging, education in their case being also given gratuitously. The building contains excellent dormitories, thoroughly ventilated; lavatories and bath-rooms for boys and girls; a work-room for the girls, in which they are taught sewing and the use of the sewing-machine by a competent mistress. Then there are roomy play-grounds, in which are gymnasia for the use of the boys. The health of the school is invariably satisfactory. Only one death has occurred during the twenty-two years Dr. Buxton has had charge of the establishment; and no matter how cholera, scarlet fever, relapsing fever, small-pox, or any epidemic may rage outside, the inmates of the Liverpool School for the Deaf and Dumb remain untouched. Dr. Bailey is surgeon to the institution, but his office is a sinecure: whilst the "hospital" or sick ward is scarcely ever required. The religious as well as the secular wants of the inmates are carefully attended to. A Sunday-school is held every Sunday morning; and in the afternoon there is a service, lasting about an hour, which is largely attended by the adult deaf and dumb throughout the town, and also from a considerable distance around Liverpool. Part of the liturgy of the Church is gone through, and afterwards Dr. Buxton delivers a sermon in what, if Dr. Buxton does not object, I would call mute eloquence: every word of which, however, is highly appreciated by his fellow-worshippers. In connection with the institution there is an adults' benevolent society, which dispenses aid to indigent deaf and dumb persons. It also supports a course of lectures at the Hibernian Schools for the adult deaf and dumb, of whom in Liverpool, I am told, there are about 200. A library is also in operation at the Hibernian Schools."

Manchester Schools.—The *Manchester Examiner and Times* of June 10 has an account of the annual examination and meeting of the Manchester schools, of which Mr. A. Patterson is the head-master. The Earl of Derby presided on the occasion, and delivered a long and able address, presenting very forcibly the economical argument for deaf-mute institutions: we are sorry we have not room for extracts.

MISCELLANEOUS.

BY THE EDITOR.

Report of the Commissioner of Education.—General Eaton's very able and valuable report for 1872, now published, contains much information concerning the education of the deaf and dumb. Beside the statistics given in the annual tabular statement of the *Annals* for January, 1873, the statistical table of this report includes various other facts of interest, as the income and expenditure of the institutions, the value of their buildings and grounds, the nature of the instruction imparted, the trades taught, the number of volumes in the libraries, etc.

The total value of the buildings and grounds of the twenty-six institutions of which a statement is given is \$4,433,250.00. This does not include the New York Institution, which is the wealthiest of all, and nine others.

Nearly all the institutions have libraries, the largest being that of the Pennsylvania Institution, which contains 5,000 volumes, and the smallest that of the Mississippi Institution, consisting of one volume! The American Asylum, and the Pennsylvania, Ohio, Virginia, Indiana, Illinois, and Maryland Institutions, possess libraries of over 1,000 volumes each. To these should be added the New York Institution, whose statistics did not reach the Commissioner in time for publication, and the Columbia Institution, which has recently made a large addition of valuable works to its collection.

The Indiana and Columbia Institutions* have laboratories: the Ohio, Virginia, Illinois, Missouri, Columbia, California, and Minnesota Institutions* have philosophical cabinets, and the Ohio, Illinois, Columbia and California Institutions* have natural history or geological collections.

* To these should be added the New York Institution.

The table designed to show the grade of instruction given, specifying "collegiate," "academical," and "ordinary branches," does not convey a strictly accurate idea of the facts, owing, doubtless, to the different interpretations put upon the meaning of these terms. "Academical" was intended to be synonymous with "secondary" instruction, and to indicate a higher grade than "ordinary branches," but this distinction was not fully observed in the replies sent to the Commissioner from the institutions. In revising the table for publication, however, we did not feel at liberty to alter the statements given by the principals. We would suggest that in future the institutions whose course extends only from five to seven years should record their instruction as consisting of "ordinary branches," while those that have high classes should say "ordinary branches and academical." The statement of the Columbia Institution, which is simply "collegiate," should be, "ordinary branches, academical, and collegiate." "Agriculture," also, in the place it occupies, implies special scientific training; whereas, as a correspondent suggests, "our institutions teach it just as Mr. Squeers did 'bot-tin-ney': even *before* a boy 'knows what it is,' he 'goes and does it.'" It would have come in more properly under the head of "trades."

The articles on education in the several States mention in some cases the institutions for the deaf and dumb, and there is a special contribution by the editor of this journal discussing the general and educational statistics of deaf-mutes, the importance of their education for their own sake and that of the community, the best method of reaching the uneducated, the advisability of compulsory instruction, the Michigan conference of principals, etc. In a paper on education in Brazil it is stated that an institution for the deaf and dumb has been in existence there since 1857.

Conference of Würtemberg and Baden Instructors.—The *Organ* of May, 1873, contains the proceedings of the ninth annual conference of the Würtemberg and Baden instructors of the deaf and dumb, held at Esslingen on the 23d and 24th of September, 1872. About thirty teachers were present, including a few from other parts of Germany and from Switzerland.

Most of the first day, after the organization of the conference was effected, was devoted to an inspection of the Esslingen Institution. Several of the classes were visited and ex-

amined, and the modes of teaching followed in the school were illustrated by the resident teachers and criticised by the other members of the conference. This, we believe, is always a feature of the German conferences, which are held at the several schools in turn from year to year, and it must be a very useful one, serving as an incentive to teachers and pupils, making the instructors of all the institutions familiar with one another's methods, and often leading to practical suggestions of no little value. The much larger numbers of our American conventions, and their being held in vacation, seem to render its adoption here impracticable.

The second day was spent in the more formal discussion of subjects relating to the instruction of the deaf and dumb. Most of these had been determined upon at the conference of the year previous, and were presented for consideration in writing by the gentlemen to whom they had severally been assigned.

The first subject discussed was "The Necessity of a Training School for Teachers of the Deaf and Dumb." The general opinion of the members of the conference was, that while such an establishment would be desirable in some respects, it was not a matter of absolute necessity, and that there were other improvements not yet obtained more worthy of making an effort for than this.

The second subject was "The Education of the Moral Nature." This was presented in an able paper by Mr. Hirzel, of Nürtingen, and elicited much discussion. The opinion was expressed that the deaf and dumb, even when most highly educated intellectually, are often lacking in the development of their moral nature; they know little of tenderness, gentleness, sympathy, compassion, gratitude, etc. This is due to the fact that they never hear those sounds and tones which are the most efficient means of touching and stirring the heart; as the singing of birds, the ringing of bells, the peals of the organ, vocal and instrumental music, and especially the human voice in all its illimitable range of feeling. Special efforts therefore are necessary on the part of their instructors to supply this deficiency. Religious instruction should always be made interesting by narratives, and should consist largely of appeals to the emotional nature; it should not be attempted to impart too much in the earlier part of the course, when the subject cannot be clearly understood. The study of natural history, ge-

ography, history, and mathematics, tending to enlarge the mind; penmanship and drawing, developing a sense of the correct and the beautiful, are important aids. Much stress also was laid upon indirect means. The institution should be made as much like a family as possible, and the officers should see to it that the influence of their example be always such as to awaken and foster gentleness and love in the hearts of their pupils. The care of domestic animals, especially dogs, birds, and other pets; the culture of little gardens; excursions in which special pains are taken to interest the pupils, are of great value. Some of the members of the conference said that they had found their pupils as grateful and susceptible while under instruction as hearing and speaking children are wont to be; but it was generally agreed that deaf-mutes after leaving the institution, being shut out from free intercourse with the rest of the world, often being deceived and ill-treated by those with whom they are associated, are peculiarly apt to become morose and bad-tempered. The expression of the countenance in addressing the deaf was mentioned by several speakers as being a substitute in some degree for the tones of the voice; but the value of the sign-language as a means of developing and educating the moral nature was recognized by none.

The next topic discussed was a periodical for deaf-mutes entitled "*Blätter für Taubstumme*," which had been published for twenty years by Mr. Wagner, of the Gmünd Institution. The recent death of Mr. Wagner led the conference to consider whether the periodical had better be continued, and if so, in what manner and by what means. The object of this little publication was to furnish deaf-mutes after they have left the institutions with reading matter in simple language adapted to their comprehension. It was chiefly religious in its character, but contained also some secular matter, instructive and entertaining, the news of the day, institution items, etc. The members of the conference were unanimous in the opinion that the periodical should be continued; the only difference of view was with respect to publishing occasional extra numbers for Catholics and Protestants respectively. The aim has been to make the religious matter entirely unsectarian, so that it might give offence to neither of the great religious parties of Germany: it was proposed to continue this course, but in addition to publish occasionally extra sheets which should contain Protestant instruction for Protestants and Catholic instruction for Catho-

lies. The majority of the members of the conference, which included adherents of both sects, favored this plan. The magazine is now conducted by Mr. Hirzel, of Gmünd.

Next came a description of certain pictures representing the four seasons, adapted for deaf-mute instruction; and this was followed by an elaborate exposition from Mr. Schöttle, of Esslingen, of the principles and methods of teaching articulation in the Esslingen school. After a brief discussion of this paper the conference adjourned, to hold their next meeting at Gmünd.

One thing that impresses us in reading the proceedings of this conference is the general recognition on the part of its members of the fact that their pupils do *not* generally acquire such a knowledge of language as to be capable of reading, with ease and profit, ordinary books and newspapers, and that they are *not* "fully restored to society" when they leave the institution. Nowhere in the literature of their profession, so far as we have seen, do the German teachers themselves make those extravagant claims for the results of their method which have been made for them by some Americans and Englishmen who have visited their schools.

The Vienna Exposition.—President Gallaudet informs us that the material contributed by our institutions for the deaf and dumb occupied a prominent place in the American department of the Exposition. The Bureau of Education, of whose collection our contributions formed a part, has received one of the nine grand diplomas awarded to Americans, these being the highest prizes given. Dr. Gallaudet's official report upon deaf-mute matters,* as commissioner from the American Government, is ready to be submitted, and we hope to publish it in the next number of the *Annals*. The contribution of the New York Institution, of which we had not received information when the others were announced in the last number of the *Annals*, and which, we are sorry to say, failed to reach the Exposition, were as follows: a file of the reports from the seventeenth to the fifty-fourth, inclusive, bound by deaf-mutes: Dr. H. P. Peet's Course of Instruction, Parts I, II, and III, in three volumes; Dr. H. P. Peet's Scripture Lessons and his

* Dr. Gallaudet has also, by direction of the commission, prepared a report upon "Government Patronage of Art."

History of the United States; and Dr. I. L. Peet's Chart of Predicates of the English Sentence.

The Next Convention.—The executive committee is to hold a meeting at the Ontario Institution some time during the present month to fix the time and place of the next convention, and for other business. Any communications for the committee should be addressed immediately to the secretary, W. J. Palmer, Ph. D., Belleville, Ontario, Canada.

New York Convention of Deaf-Mutes.—The fifth biennial convention of the "Empire State Association" was held August 27, 28, and 29, at Rochester, N. Y. About one hundred and fifty deaf-mutes were present. The members were cordially welcomed by the mayor of the city, and an address was then delivered by Mr. H. C. Rider, the president of the association. Addresses and social reunions were the chief features of the convention, very little business of any kind being transacted. A proposal to establish a mutual insurance league of deaf-mutes was laid on the table. An oration prepared by Mr. John R. Burnet was read by Dr. Peet, a eulogy upon Dr. H. P. Peet was delivered by Mr. Alphonso Johnson, a paper upon Pisciculture was read by Mr. Seth Green, and an address on Temperance was given by Dr. Peet. Besides these there were extemporaneous addresses by Rev. Dr. Gallaudet, Rev. Mr. Berry, Dr. Peet, and others. Full and interesting accounts of the proceedings may be found in the *Silent World* of September 15, the *Deaf-Mute's Journal* of Sept 11 and subsequent numbers, and the *Deaf-Mute Advance*.

The Deaf-Mute Murderer.—Levi Bodine, the uneducated deaf-mute, of whose trial for the murder of his employer an account was given in the *Annals** some time ago, is now confined in the Asylum for Insane Criminals at Auburn, N. Y. How he came to be sent there we do not know: there was no evidence of insanity at his trial, but only of an uneducated reason acting under great provocation in a way that he had never been taught was wrong. The late report of the superintendent of the asylum says of him that he is an unusually bright lad, quick to learn, but of violent temper. It seems a pity that some means

* Vol. xvi, p. 64, and vol. xvii, p. 89.

should not even now be provided for giving him the education of which he was deprived in early youth, and the lack of which was unquestionably the cause of his bloody deed.

Resolutions.—At the fifth biennial convention of the Empire State Association of Deaf-Mutes, held at Rochester, N. Y., August 27, 28, and 29, 1873, Mr. Alphonso Johnson, of the New York Institution for the Deaf and Dumb, offered the following preamble and resolutions, which were adopted:

“Whereas, on the first of January last, it was the pleasure of Almighty God to remove from among us our friend and benefactor, Harvey P. Peet, Ph. D., LL. D., who was for a period of thirty-seven years the able and efficient principal of the New York Institution for the Education of the Deaf and Dumb; and whereas, we, the members of the Empire State Association of Deaf-Mutes in convention assembled, and who were formerly his pupils, entertain for his memory profound respect and esteem: therefore, be it

“*Resolved*, That we sincerely lament the death of Dr. Peet both on account of his disinterested labors for the intellectual, moral, and religious improvement of the deaf and dumb, and his many good qualities which were so constantly manifested in all the relations of life.

“*Resolved*, That we will ever treasure in our memories his virtues, believing that he possessed some of the best qualities of the teacher and principal, rarely, if ever, surpassed, and not often equalled.

“*Resolved*, That as an association banded together, having for its object the promotion of the intellectual, moral, and spiritual welfare of the deaf and dumb, particularly the latter, we have special cause for gratitude to Dr. Peet who did so much for us.

“*Resolved*, That the members of the Empire State Association for the Deaf and Dumb desire through this medium to express their heartfelt sympathy and sincere condolence with the family of the deceased in this irreparable calamity which in the wisdom of Divine Providence has been visited upon them.”

Visible Speech.—Mr. A. Graham Bell has been appointed professor in the “school of oratory” of the Boston University, where, beside training students in the culture of the voice and the mechanism of speech, he will continue to give instruction in “Visible Speech” to persons intending to become teachers of articulation to the deaf and dumb. The private school for deaf-mutes under Mr. Bell’s direction has been removed to Salem, Mass.

Date Due

All books are subject to recall after two weeks.

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